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County Hall,
Hertford.
September, 1952.

To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

I have the honour to present my eleventh and twelfth Reports as County Medical Officer.

I must express my regrets that the 1950 Report is overdue, but I trust that the Committee will share my view that I would not be justified in carrying additional staff in the Department merely to ensure that the Annual Report is published in good time. The collection of statistics throughout the year presents no problem and these can quickly be related to the Registrar-General's official figures when they are received in June each year. It is then possible to consider the commentary on the statistics and it is convenient at the same time to write the general text of the Report, but this work has to be done by myself or by senior members of the staff. We aim at completing the draft of the text during the summer recess, but if one misses this tide in the affairs of the Department there is scant prospect of giving any time to the Report until the following spring, because of the demands made on the senior staff by the October meeting of the Committee, and by the preparation and defence of the Departmental Estimates which preoccupies us during the winter months.

The loss of three key members of the staff in the summer of 1951 led to the Report, which was in an advanced state of preparation, being laid aside and by the time it became possible to resume work on it the Registrar-General's figures for 1951 were in the offing. It seemed reasonable to retrieve the situation to some extent by publishing combined Reports for 1950 and 1951, thus getting the 1951 Report published in good time.

The Tables, where possible, show the statistics for both 1950 and 1951. The commentary relates to both years.

My thanks are due to the members of my staff who have contributed reports on individual services or otherwise assisted in the compilation and preparation of these reports.

As will be seen from comparison between page 5 of my 1949 Report and page 5 of the present one, there have been many changes in the staff of the Department. It is fitting that in this context I should record the death of Dr. A. P. Ford who, for twenty-nine years, served the County Council as Clinical Tuberculosis Officer. Dr. Ford was transferred to the staff of the Regional Hospital Board in July, 1948, but it is particularly for his work in the County Health Department that Dr. Ford's name is remembered and respected by the practitioners and public in Hertfordshire. Our sympathies go to his widow and family.

Last year, in this letter, I made reference to Reports of my predecessors and, since members of the Committee appeared to find this an interesting innovation, I have again turned to the Reports of fifty years ago.

The Report for 1900 is by Dr. Robert Ayton Dunn, our second County Medical Officer.

The 1901 Report is the first by Dr. Fremantle, my penultimate predecessor.

These Reports show a progressive fall in the Infant Mortality Rate from 120 in 1899 to 112 in 1900 and 103 in 1901.

In 1900, diphtheria deaths rose to 57, the total number of cases reported being 382. Whooping cough accounted for 62 deaths in 1900. The corresponding statistics for 1950 and 1951 will be found on tables 4, 5, 14, and 15 of my Reports.

In the first Report, there was a reference to houses in the County which were made of wood and thatch, with floors neither bricked nor boarded, and quite unfit for human habitation. The existence of these houses and the overcrowding that prevailed in them were attributed to the scarcity of houses in the County. Sanitary Districts were warned that houses were falling into disrepair because their maintenance was being neglected. A similar observation will be found on page 89 of my Report.

In the 1900 Report, there is a reference to an outbreak of " Zymotic Enteritis " at Harpenden, in which there were 60 to 70 cases and 14 deaths. This experience might be contrasted with the happier outcome of the epidemic reported on page 86 of my Report.

Throughout the 1900 and 1901 Reports, there are constant pleas by the Medical Officers of Health that they should be given more effective powers for dealing with the menace of tuberculosis. Most of them seemed to favour the idea that cases of tuberculosis should be notified, but one Medical Officer curtly dismisses this idea with the observation that notification would be useless unless it were compulsory, and that compulsory notification of this disease is, of course, quite unthinkable.

The Medical Officer of Health of the Tring District Council records the decision of his authority to break away from the Joint Isolation Hospital at Aldbury and build its own hospital. Both these hospitals are now standing empty.

Dr. Fremantle prefaces his Report by asking the Medical Officers to write in a form which is intelligible to the ratepayers, and likens the average member of the community with the Medical Officer's Annual Report to a working man who is not a regular church-goer endeavouring to follow the Service in a Prayer-Book.

Later, Dr. Fremantle congratulates the Medical Officers in the County on the fact that, during the year when smallpox was raging in London, Hertfordshire escaped " virtually scotfree ". He quotes experience in Essex, where there were 227 cases and 25 deaths, to support his contention that we cannot assume that this happy experience will continue indefinitely in Hertfordshire, and makes a strong plea for vaccination to be taken out of the hands of the Guardians and transferred to the District Councils or County Councils.

Last year, I quoted references to complaints of nuisance arising from London manure being conveyed through the streets of Baldock. The parallel in the Reports for 1900 and 1901 is a complaint from Stevenage of a nuisance which arises from trains of manure standing in the railway siding. The modern version of this nuisance is referred to in my Report on page 90.

I am, Ladies and Gentlemen,

Your obedient servant,

J. L. DUNLOP,

County Medical Officer.

CHAIRMAN OF THE HEALTH COMMITTEE.

G. Rollo Walker, Esq.

STAFF.

(As at 31st December, 1951.)

County Medical Officer.

J. L. Dunlop, M.D., D.P.H.

Deputy County Medical Officer.

W. Stewart, M.B., Ch.B., D.P.H.

County Dental Officer.

A. C. Wilson, L.D.S., R.C.S.

Divisional Medical Officers.

(See also page 7.)

Dacorum.

M. Gross, M.B., B.S., D.P.H., Churchill Park Road, Hemel Hempstead.

South-West Herts.

R. C. M. Pearson, M.D., M.R.C.P. (Ed.), D.P.H., Town Hall, Watford.

St. Albans.

J. C. Sleigh, M.B., Ch.B., D.P.H., 15 Hatfield Road, St. Albans.

North Herts.

V. R. Walker, M.B., Ch.B., B.Sc., D.P.H., 12 Brand Street, Hitchin.

Welwyn.

G. R. Taylor, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H., Howardsgate, Welwyn Garden City.

South Herts Division
East Herts Division } No Divisional Scheme in force.

Assistant County Medical Officers.

R. M. Allinson, M.B., Ch.B., D.P.H.
F. Barasi, M.R.C.S., L.R.C.P., D.P.H.
B. E. S. Colman, B.A., M.R.C.S., L.R.C.P.
J. E. Crawley, M.B., Ch.B., M.R.C.P.(Ed.).
M. M. Harwood, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.
E. M. Jones, M.B., Ch.B., D.P.H.
L. S. Karpati, M.D. (Graz).
M. S. Miller, B.A., M.B., Ch.B., B.A.O., D.P.H.
S. J. Moynihan, M.R.C.S., L.R.C.P.
H. E. D. E. Ormiston, M.B., B.S., D.P.H.
M. Ward, M.B., Ch.B., D.P.H.

Chest Physicians.

T. A. W. Edwards, B.A., M.B., B.Ch., M.R.C.P.
A. G. Hounslow, M.D.
N. A. Neville, B.M., B.Ch., M.R.C.P.
P. W. Roe, B.A., B.M., B.Ch.
J. B. Shaw, M.D., D.P.H.

County Consulting Psychiatrist.

H. A. Palmer, M.D., M.B., Ch.B., D.P.M., M.R.C.P.

Honorary Obstetric Adviser.

F. Neon Reynolds, F.R.C.S.(Ed.)., F.R.C.O.G.

Honorary Obstetric Analgesist.
J. E. Elam, B.A., M R.C.S., L.R.C.P., L.M.S.S.A.

Honorary County Ophthalmic Officer.
K. F. Matthews, M.R.C.S., L.R.C.P., D.O.M.S., D.P.H.

County Nursing Officer.
F. MacDonald, S.R.N., S.C.M., C.R.S.I., H.V., Q.N., M.T.D., T.A.

County Health Inspector.
J. L. Stringer, M.R.S.I., Cert.S.I.B.

Senior Authorized Officer.
W. H. Finch.
(Deputy County Welfare Officer.)

Day Nurseries Supervisor.
H. J. Howse, M.B.E., S.R.N., S.C.M., H.V. Cert., Diploma of Mothercraft and Child Welfare.

Almoners.
U. M. Ballance, A.M.I.A.
S. Bone, A.M.I.A.
J. R. Horton, A.M.I.A.
M. Howard-Jones, A.M.I.A.
P. Morfey, M.A., A.M.I.A.
M. J. Waghorn, A.M.I.A.

Home Help Organiser
H. M. Watson.

Social Workers, Mental Health.
E. M. Morris.
A. G. Peace.
H. J. S. Taylor.

Organizer of Occupation Centres.
P. E. Rock.

Chief Clerk.
W. A. Treharne, A.C.I.S.

Campions Ante- and Post-Natal Hostel.
Matron : E F. Belcher S.R.N., S.C.M.

MEDICAL OFFICERS OF HEALTH AND SANITARY INSPECTORS OF COUNTY DISTRICTS.

(As at 31.12.1951.)

Division.	*District M.O.H.*	*County District.*	*Sanitary Inspector.*
East Herts	Dr. E. M. Jones (A.C.M.O.).	Bishop's Stortford U.D.	Mr. A. L. Good
	*Dr. C. R. Hillis (temporary).	Cheshunt U.D.	Mr. C. Wilson
	Dr. J. Wildman	Hertford B.	Mr. B. Peck
		Hoddesdon U.D.	Mr. W. N. David
		Sawbridgeworth U.D.	Mr. C. A. Ford
		Ware U.D.	Mr. C. J. Lucas
		Braughing R.D.	Mr. E. E. Wateridge
		Hertford R.D.	Mr. H. E. Gilby
		Ware R.D.	Mr. A. D. G. Goold.
North Herts	Dr. V. R. Walker **(Divisional County M.O.).**	Baldock U.D.	Mr. B. W. E. Makepiece
		Hitchin U.D.	Mr. N. Holt
		Letchworth U.D.	Mr. A. Jump
		Royston U.D.	Mr. S. M. Jackson
		Stevenage U.D.	Mr. H. Foden
		Hitchin R.D.	Mr W. M. Matthews
St. Albans	Dr. J. C. Sleigh **(Divisional County M.O.).**	City of St. Albans	Mr. R. E. C. Goddard
		Harpenden U.D.	Mr. W. G. Coker
		St. Albans R.D.	Mr. D. J. Graham.
	*Dr. G. W. Everett (temporary).	Elstree R.D.	Mr. A. D. S. Blackhall
South Herts	Dr. A. L. Hyatt (temporary).	Barnet U.D.	Mr. J. B. Wilson
	*Dr. C. M. Scott (temporary).	East Barnet U.D.	Mr. E. Houghton.
South-West Herts.	Dr. R. C. M. Pearson **(Divisional County M.O.).**	Watford B.	Mr. R. V. Jacob
	Dr. W. Harvey	Bushey U.D.	Mr. A. C. F. Gisborne
		Chorleywood U.D.	Mr. W. E. Hands
		Rickmansworth U.D.	Mr. C. R. Alexander
		Watford R.D.	Mr. S. N. Grigg
Welwyn	Dr. G. R. Taylor, **(Divisional County M.O.**	Welwyn Garden City U.D.	Mr. M. Stockdale
		Hatfield R.D.	Mr. S. W. Wright
		Welwyn R.D.	Mr. C. B. Borthwick
Dacorum	Dr. M. Gross **(Divisional County M.O.).**	Hemel Hempstead B.	Mr. A. C. Horne
		Berkhamsted U.D.	Mr. C. E. Brogan
		Tring U.D.	Mr. J. F. Norris
		Berkhamsted R.D.	Mr. C. Laidman
		Hemel Hempstead R.D.	Mr. R. H. T. Chappell

* Also holds appointment as part-time A.C.M.O.

Except where indicated, the officers named here serve County District Councils and are not on the staff of the County Council. This list is included in the Report for the information of those interested in the staffing of the Health Services in the County as a whole.

VITAL STATISTICS FOR THE COUNTY OF HERTFORD.

Table 1.

POPULATION AND ACREAGE.

	Acreage (Land and Water)	(Population At Mid-Year)			
		Estimate, 1948	Estimate, 1949	Estimate, 1950	Estimate, 1951
Urban Districts .	90,426	426 780	429 248	435,493	436 000
Rural Districts .	314,097	161,020	166,762	171,147	182,700
County . . .	404,523	587,800	596,010	606,640	618,700
England and Wales .	37,339,215	43,800,000			

Table 2.

STATISTICAL SUMMARY.

	See Table	Urban			Rural			County		
		1949	1950	1951	1949	1950	1951	1949	1950	1951
Death-rate . . .	3	10·41	10·28	11·08	9·58	9·00	9·14	10·18	9·92	10·51
Live Birth-rate . . .	6	15·67	14·60	14·64	16·63	15·94	15·55	15·94	14·98	14·91
Infant Mortality-rate .	8	20·22	21·39	24·43	20·56	18·19	23·22	20·32	20·57	24·06
Maternal Mortality . .	11	0·29	0·93	0·15	0·35	1·44	0·69	0·31	1·08	0·32
Epidemic Death-rate . .	—	0·04	0·06	0·06	0·07	0·07	0·03	0·05	0·06	0·05
Phthisis Death-rate . .	23	0·25	0·29	0·16	0·20	0·14	0·19	0·23	0·20	0·17
Cancer Death-rate . .	12	1·82	1·84	1·83	1·55	1·58	1·26	1·74	1·77	1·66
Heart Disease Death-rate .	13	3·04	3·20	3·53	3·01	3·08	3·21	3·03	3·21	3·43

This summary of the principal vital statistics is prepared from data supplied by the Registrar-General. In the Tables referred to in the second column the statistics are given in greater detail.

In this and subsequent Tables, Infant Mortality is expressed as a rate per thousand live births, and Maternal Mortality as a rate per thousand live and still births.

Table 3.

DEATH-RATE.

(Per 1,000 Population.)

	Hertfordshire						England and Wales
	Urban		Rural		County		
	Number	Rate	Number	Rate	Number	Rate	Rate
1935–44 (Average for ten years).	3,977	10·4	1,417	10·1	5,394	10·3	12·3
1945 . . .	4,236	10·8	1,400	9·9	5,636	10·5	11·4
1946 . . .	4,159	10·1	1,441	9·9	5,600	10·0	11·5
1947 . . .	4,576	10·9	1,623	10·8	6,198	10·9	12·0
1948 . . .	4,106	9·6	1,414	8·8	5,520	9·4	10·8
1949 . . .	4,469	10·4	1,597	9·6	6,066	10·2	11·7
1950 . . .	4,479	10·3	1,540	9·0	6,019	9·9	11·6
1951 . . .	4,832	11·1	1,670	9·1	6,502	10.5	12·5

Table 4.—Causes of Death, 1950.

		Age Groups—Urban Districts															Age Groups—Rural Districts															County Total	
		0 —		1 —		5 —		15 —		45 —		65 —		All Ages		Total M&F	0 —		1 —		5 —		15 —		45 —		65 —		All Ages		Total M&F		
		M	F	M	F	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F	M	F	M	F			
1	Tuberculosis — respiratory	—	—	2	—	—	—	19	22	31	7	10	4	62	33	95	—	—	—	—	—	—	3	9	3	1	7	1	13	11	24	119	1
2	Tuberculosis—other	—	1	—	—	—	—	2	2	2	3	—	4	4	10	14	—	—	—	—	—	—	2	2	2	—	—	—	4	2	6	20	2
3	Syphilitic diseases	—	—	—	—	—	—	1	2	8	—	7	2	16	4	20	—	—	—	—	—	—	—	—	3	—	—	2	3	2	5	25	3
4	Diptheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
5	Whooping cough	—	—	—	1	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	5
6	Meningococcal infections	—	1	1	—	—	—	—	—	—	—	—	1	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	6
7	Acute Poliomyelitis	—	—	1	—	2	1	1	—	—	—	—	—	4	1	5	—	—	—	—	1	—	—	4	—	—	—	—	1	4	5	10	7
8	Measles	—	—	2	—	—	—	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	8
9	Other infective and parasitic diseases	1	—	1	—	2	—	3	1	1	2	3	2	11	5	16	—	—	—	—	—	—	3	—	1	—	1	2	5	2	7	23	9
10	Malignant neoplasm—stomach	—	—	—	—	—	—	3	2	17	9	41	33	61	44	105	—	—	—	—	—	—	3	2	5	4	14	15	22	21	43	148	10
11	Malignant neoplasm, lung, bronchus	—	—	—	—	—	—	5	3	55	5	30	12	90	20	110	—	—	—	—	—	—	—	2	24	1	12	2	36	5	41	151	11
12	Malignant neoplasm—breast	—	—	—	—	—	—	—	10	1	48	1	51	2	109	111	—	—	—	—	—	—	—	2	—	11	1	11	1	24	25	136	12
13	Malignant neoplasm—uterus	—	—	—	—	—	—	—	3	—	17	—	15	—	35	35	—	—	—	—	—	—	—	—	—	5	—	4	—	9	9	44	13
14	Other malignant and lymphatic neoplasms	—	—	1	—	1	—	15	14	57	80	152	119	226	213	439	—	—	—	1	—	—	4	3	20	25	63	37	87	66	153	592	14
15	Leukæmia, aleukæmia	—	—	1	—	—	1	2	1	3	3	6	3	12	8	20	—	—	—	—	—	1	1	1	1	1	1	1	3	4	7	27	15
16	Diabetes	—	—	—	—	—	—	—	1	4	4	8	18	12	23	35	—	—	—	—	—	—	—	—	1	1	3	4	4	5	9	44	16
17	Vascular lesions of nervous system	1	—	—	—	—	—	2	1	40	44	195	301	238	346	584	—	—	—	—	—	—	1	—	18	18	72	93	91	111	202	786	17
18	Coronary disease—angina	—	—	—	—	—	—	9	1	101	34	226	195	336	230	566	—	—	—	—	—	—	4	1	47	12	80	74	131	87	218	784	18
19	Hypertension with heart disease	—	—	—	—	—	—	2	1	17	8	55	70	74	79	153	—	—	—	—	—	—	1	—	6	3	12	19	19	22	41	194	19
20	Other beart diseases	—	—	—	—	2	—	12	15	49	38	231	355	294	408	702	—	—	—	—	—	1	3	3	11	14	96	140	110	158	268	970	20
21	Other circulatory diseases	—	—	—	—	—	—	3	3	14	8	54	65	71	76	147	—	—	—	—	—	—	—	1	3	4	25	21	28	26	54	201	21
22	Influenza	—	1	—	—	—	—	—	—	5	2	7	13	12	16	28	—	—	—	—	—	—	2	1	2	2	4	3	8	6	14	42	22
23	Pneumonia	2	6	1	3	2	—	7	5	14	9	49	81	75	104	179	3	3	1	1	—	—	1	1	6	4	9	17	20	26	46	225	23
24	Bronchitis	—	—	—	—	—	—	1	1	36	8	96	78	133	87	220	—	—	—	—	—	—	—	1	7	—	22	9	29	10	39	259	24
25	Other diseases of respiratory system	1	1	—	—	—	—	4	1	9	4	14	5	28	11	39	—	—	1	—	—	—	—	1	2	1	9	4	12	6	18	57	25
26	Ulcer of stomach or duodenum	—	—	—	—	—	—	4	1	15	3	13	11	32	15	47	—	—	—	—	—	—	1	—	4	1	5	5	10	6	16	63	26
27	Gastritis, enteritis, and diarrhœa	3	—	1	—	—	—	1	1	1	3	6	10	12	14	26	2	1	—	—	—	—	1	1	—	—	—	2	3	4	7	33	27
28	Nephritis and nephrosis	—	—	—	—	—	—	3	2	9	5	12	15	24	22	46	—	—	—	—	—	1	—	—	2	1	7	10	9	12	21	67	28
29	Hyperplasia of prostate	—	—	—	—	—	—	—	—	6	—	52	—	58	—	58	—	—	—	—	—	—	—	—	1	—	23	—	24	—	24	82	29
30	Pregnancy, childbirth, abortion	—	—	—	—	—	—	—	6	—	—	—	—	—	6	6	—	—	—	—	—	—	—	4	—	—	—	—	—	4	4	10	30
31	Congenital malformations	16	14	—	1	2	1	1	3	2	1	1	—	22	20	42	7	1	—	—	—	—	—	—	1	—	—	2	8	3	11	53	31
32	Other defined and ill-defined diseases	54	26	1	2	5	2	14	18	33	42	107	152	214	242	456	20	13	—	2	1	1	5	11	10	9	29	57	65	93	158	614	32
33	Motor vehicle accidents	—	—	1	—	1	1	17	2	4	5	5	6	28	14	42	—	—	1	—	1	—	11	—	3	2	6	—	22	2	24	66	33
34	All other accidents.	6	1	2	2	2	—	13	—	6	5	12	40	41	48	89	—	1	2	—	2	—	5	2	—	1	2	13	11	17	28	117	34
35	Suicide	—	—	—	—	—	—	6	4	11	7	6	—	23	11	34	—	—	—	—	—	—	2	1	7	—	1	1	10	2	12	46	35
36	Homicide and operations of war	—	1	—	—	—	—	2	1	—	—	—	—	2	2	4	—	—	—	—	—	—	—	—	1	—	—	—	1	—	1	5	36
	Total	84	52	15	9	19	6	152	127	551	404	1399	1661	2220	2259	4,479	32	19	5	4	5	4	53	53	191	121	504	549	790	750	1,540	6,019	

Table 5.—Causes of Death, 1951.

		Age Groups—Urban Districts															Age Groups—Rural Districts												County Total	
		0—		1—		5—		15—		45—		65—		All Ages		Total M&F	0—		1—		5—		15—		45—		65—		All Ages		Total M&F	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F	M	F	M	F			
1	Tuberculosis — respiratory	—	—	—	1	—	—	12	21	17	9	10	1	39	32	71	—	—	—	1	—	—	6	8	6	4	7	2	19	15	34	105	1
2	Tuberculosis—other	—	—	—	—	—	—	1	1	2	—	1	1	4	2	6	—	—	—	—	1	1	—	—	—	—	1	—	2	1	3	9	2
3	Syphilitic diseases	—	—	—	—	—	—	1	—	1	2	6	2	8	4	12	—	—	—	—	—	—	—	—	3	—	1	—	4	—	4	16	3
4	Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
5	Whooping cough	1	—	—	1	—	—	—	—	—	—	—	—	1	1	2	—	—	—	1	—	—	—	—	—	—	—	—	—	1	1	3	5
6	Meningococcal infections	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	6
7	Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7
8	Measles	—	1	1	1	—	—	—	1	—	—	—	—	1	3	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	8
9	Other infective and parasitic diseases	1	—	—	1		1	1	2	7	5	2	1	11	10	21	—	—	—	—	—	1	—	—	1	—	2	—	3	1	4	25	9
10	Malignant neoplasm—stomach	—	—	—	—	—	—	3	3	36	22	48	44	87	69	156	—	—	—	—	—	—	2	1	8	2	15	15	25	18	43	199	10
11	Malignant neoplasm, lung, bronchus	—	—	—	—	—	—	4	1	74	8	42	9	120	18	138	—	—	—	1	—	—	2	1	13	—	16	2	31	4	35	173	11
12	Malignant neoplasm—breast	—	—	—	—	—	—	—	7	—	33	—	32	—	72	72	—	—	—	—	—	—	—	7	—	9	—	7	—	23	23	95	12
13	Malignant neoplasm—uterus	—	—	—	—	—	—	—	3	—	18	—	18	—	39	39	—	—	—	—	—	—	—	1	—	4	—	3	—	8	8	47	13
14	Other malignant and lymphatic neoplasms	—	—	1	2	2	1	16	12	65	65	117	110	201	190	391	—	—	—	1	—	1	5	2	21	24	33	35	59	63	122	513	14
15	Leukæmia, aleukæmia	—	—	—	—	—	—	2	3	2	2	3	4	7	9	16	—	—	—	—	—	—	—	—	2	1	1	1	3	2	5	21	15
16	Diabetes	—	—	—	—	—	—	2	2	4	3	12	15	18	20	38	—	—	—	1	—	—	1	—	—	3	1	9	2	13	15	53	16
17	Vascular lesions of nervous system	—	—	—	—	—	—	6	9	39	73	197	293	242	375	617	—	—	—	—	—	—	1	2	15	16	81	86	97	104	201	818	17
18	Coronary disease—angina	—	—	—	—	—	—	6	—	112	27	238	198	356	225	581	—	—	—	—	—	—	8	1	37	10	92	82	137	93	230	811	18
19	Hypertension with heart disease	—	—	—	—	—	—	2	—	13	16	64	75	79	91	170	—	—	—	—	—	—	1	—	5	9	17	27	23	36	59	229	19
20	Other heart diseases	—	—	—	—	—	—	7	8	46	37	248	441	301	486	787	—	—	—	—	—	1	4	2	13	9	123	146	140	158	298	1,085	20
21	Other circulatory diseases	—	—	—	—	—	—	1	4	11	17	74	85	86	106	192	—	—	—	—	—	—	—	1	1	4	29	28	30	33	63	255	21
22	Influenza	1	—	—	1	—	—	2	2	12	7	29	45	44	55	99	—	—	—	—	—	—	—	2	4	3	12	14	16	19	35	134	22
23	Pneumonia	3	2	1	1	2	—	9	5	20	18	69	105	104	131	235	1	3	1	1	—	—	—	1	13	5	15	28	30	38	68	303	23
24	Bronchitis	3	1	—	—	—	—	3	2	37	10	143	99	186	112	298	1	—	1	1	—	—	—	—	14	8	45	22	61	31	92	390	24
25	Other diseases of respiratory system	—	—	1	1	—	—	2	1	14	5	12	12	29	19	48	—	—	1	—	1	—	—	1	2	—	6	5	10	6	16	64	25
26	Ulcer of stomach or duodenum	—	—	—	—	—	—	4	—	24	4	28	14	56	18	74	—	—	—	—	—	—	2	1	4	1	5	3	11	5	16	90	26
27	Gastritis, enteritis, and diarrhœa	3	—	2	—	—	—	1	—	2	1	1	5	9	6	15	2	1	—	—	—	—	1	—	3	—	3	1	9	2	11	26	27
28	Nephritis and nephrosis	1	—	1	—	—	—	3	5	7	6	6	13	18	24	42	—	—	—	—	—	—	1	—	1	3	5	9	7	12	19	61	28
29	Hyperplasia of prostate	—	—	—	—	—	—	—	—	2	—	40	—	42	—	42	—	—	—	—	—	—	—	—	1	—	12	—	13	—	13	55	29
30	Pregnancy, childbirth, abortion	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1	—	—	—	—	—	—	—	2	—	—	—	—	—	2	2	3	30
31	Congenital malformations	16	12	2	1	1	—	2	2	—	3	1	—	22	18	40	2	9	—	—	—	—	—	—	1	—	—	—	3	9	12	52	31
32	Other defined and ill-defined diseases	57	41	4	5	1	1	17	18	37	33	91	129	207	227	434	30	14	1	1	—	1	5	6	12	10	34	45	82	77	159	593	32
33	Motor vehicle accidents	—	—	1	2	1	2	19	1	7	7	4	2	32	14	46	—	—	—	—	4	—	14	2	6	—	2	—	26	2	28	74	33
34	All other accidents.	5	7	3	2	1	1	15	3	14	5	11	24	49	52	101	1	2	—	3	—	—	7	3	7	2	4	4	19	14	33	134	34
35	Suicide	—	—	—	—	—	—	5	2	10	7	10	6	25	15	40	—	—	—	—	—	—	3	2	—	7	2	2	5	11	16	56	35
36	Homicide and operations of war	—	—	—	—	—	—	—	—	1	—	2	—	3	—	3	—	—	—	—	—	—	—	—	—	—	1	1	1	1	2	5	36
	Total	91	65	17	19	8	6	146	119	616	443	1509	1783	2387	2445	4,832	36	26	3	10	6	5	63	47	184	132	562	563	868	802	1,670	6,502	

The "causes of death" have been altered by the Registrar General and it is not, therefore, possible to make any strict comparison with previous years.

There were ten deaths from poliomyelitis in 1950 and no deaths in 1951, compared with nineteen deaths in 1949. This disease continues to present a challenge to workers in the public health fields, but it is perhaps useful to glance down the Table and see that in 1950 there were sixty-six deaths from motor vehicle accidents and one hundred and seventeen from all other accidents. It is to be hoped that all doctors and others who profess an interest in preventive medicine will come to regard the prevention of accidents as a legitimate sphere of operation. Education of the public in accident prevention may yield more rewarding results than a continued stressing of the clichés which have crept into so many lectures on Health Education.

TABLE 6.

LIVE BIRTH-RATE.

(Per 1,000 Population.)

	Hertfordshire						England and Wales
	Urban		Rural		County		
	Number	Rate	Number	Rate	Number	Rate	Rate
1935–44 (Average for ten years).	5,823	15·3	2,049	14·6	7,872	15·1	15·4
1945 . . .	6,467	16·4	2,297	16·2	8,764	16·4	16·1
1946 . . .	7,806	19·0	2,716	18·6	10,522	18·9	19·1
1947 . . .	8,195	19·5	2,870	19·2	11,065	19·4	20·5
1948 . . .	7,065	16·6	2,691	16·7	9,756	16·6	17·9
1949 . . .	6,725	15·7	2,773	16·6	9,498	15·9	16·7
1950 . . .	6,357	14·6	2,728	15·9	9,085	15·0	15·8
1951 . . .	6,384	14·6	2,841	15·6	9,225	14·9	15·5

The figures given here relate only to the births which, in the opinion of the Registrar-General, were attributable to Hertfordshire residents.

TABLE 7.

STILLBIRTH-RATE.

	Number of Stillbirths			Stillbirth-Rate (per 1,000 total births)		
	1949	1950	1951	1949	1950	1951
Urban Districts .	139	118	155	20·3	18·2	23·7
Rural Districts .	56	56	53	19·8	20·1	18·31
Total County . .	195	174	208	20·1	18·8	22·05
England and Wales .	16,947	16,012	15,949	22·7	22·6	22·9

Stillbirths in Domiciliary Practice.

An analysis of stillbirths which occurred in domiciliary practice and which were notified in accordance with the rules of the Central Midwives Board reveals the following :—

	1950.	*1951.*
Total stillbirths notified	*28*	*31*
Born before arrival of midwife	7	—
Macerated foetus	4	4
Inanition	2	—
Cord difficulties	2	7
Malformation	1	3
Mal presentation	2	4
Prematurity	—	1
Rhesus factor	—	3
Difficult labour	2	3
Ante-partum hæmorrhage	2	3
Post-partum hæmorrhage	1	—
Toxæmia of mother	1	1
Accident to mother during pregnancy	1	—
Shock during ante-natal period	1	—
No apparent cause	2	2

Of the 28 stillbirths notified in 1950

Four cases were booked for hospital confinement, but were attended by a domiciliary midwife as emergency cases.
Ten had engaged a doctor.
Twelve had engaged a midwife.
Two had not booked a doctor or midwife and had received no ante-natal supervision.

Of the 31 stillbirths notified in 1951

Thirteen had engaged a doctor.
Eighteen had engaged a midwife.

Table 8.

INFANT MORTALITY RATE.

(Per 1,000 Live Births.)

	Hertfordshire						England and Wales
	Urban		Rural		County		
	Number	Rate	Number	Rate	Number	Rate	Rate
1935–44 (Average for ten years).	219	37	71	35	290	36	54
1945	215	33	75	33	290	33	46
1946	197	25	83	31	280	27	43
1947	243	30	99	35	342	31	41
1948	160	23	68	25	228	23	34
1949	136	20	57	20	193	20	32
1950	136	21	51	19	187	21	30
1951	156	24	66	23	222	24	30

The infant mortality rate is the number of deaths in infants under one year expressed as a rate per thousand live births.

In previous years I have discussed the principal causes of deaths in this group. Unfortunately the change in the official list of causes makes it impossible to do so for 1950–1951. Pneumonia, which was responsible for thirty-one deaths in 1949, was responsible for fourteen in 1950, and nine in 1951, but most of the other diseases, which were discussed in the previous reports are now grouped together under the title of ' Other defined and ill defined diseases '. (See Tables 4 and 5.)

Table 9. (1950).

Details of Live Births and Infant Deaths in Districts.

	Live Births					No. of Infant Deaths (under four weeks)						No. of Infant Deaths (under one year)					
	Legitimate		Illegitimate		Total	Legitimate		Illegitimate		Total	Rate	Legitimate		Illegitimate		Total	Rate
	Males	Females	Males	Females		Males	Females	Males	Females			Males	Females	Males	Females		
URBAN—																	
Baldock	51	44	3	2	100	3	—	—	—	3	30·00	4	—	—	—	4	40·00
Barnet	156	171	12	11	350	2	3	—	—	5	14·29	2	3	—	—	5	14·29
Berkhamsted	75	75	1	4	155	3	—	—	—	3	19·35	3	1	—	—	4	25·80
Bishop's Stortford	87	84	7	4	182	1	1	—	—	2	10·99	1	1	—	—	2	10·99
Bushey	115	113	2	7	237	—	1	—	—	1	4·22	—	2	—	—	2	8·44
Cheshunt	180	162	8	4	354	7	1	—	—	8	22·60	7	1	—	—	8	22·60
Chorleywood	16	21	—	1	38	—	—	—	—	—	—	1	1	—	—	2	52·62
East Barnet	247	258	8	3	516	3	4	—	—	7	13·57	3	5	—	1	9	17·43
Harpenden	98	94	3	1	196	1	3	—	—	4	20·41	1	4	—	—	5	25·51
Hemel Hempstead	160	180	2	8	350	2	4	—	—	6	17·14	2	5	—	—	7	20·01
Hertford	100	99	4	1	204	—	—	—	—	—	—	1	—	—	—	1	4·90
Hitchin	155	131	7	8	301	2	1	—	—	3	9·97	3	1	—	—	4	13·29
Hoddesdon	101	110	4	3	218	1	1	—	—	2	9·17	3	3	—	—	6	27·52
Letchworth	145	141	6	4	296	1	2	—	—	3	10·14	1	3	—	—	4	13·51
Rickmansworth	216	165	8	5	394	8	1	1	—	10	25·38	8	1	1	—	10	25·38
Royston	35	32	6	2	75	2	2	—	—	4	53·33	2	2	—	—	4	53·33
St. Albans	357	323	27	13	720	11	4	—	—	15	20·83	17	7	—	—	24	33·31
Sawbridgeworth	31	33	1	1	66	1	—	—	—	1	15·15	1	—	—	—	1	15·15
Stevenage	54	36	—	1	91	—	—	—	—	—	—	—	—	—	—	—	—
Tring	42	14	—	6	62	1	—	—	—	1	16·13	1	—	—	—	1	16·13
Ware	70	69	2	12	153	2	1	1	—	3	19·61	3	1	—	—	4	26·14
Watford	501	500	24	13	1,038	12	4	—	—	17	16·38	16	7	1	—	24	23·12
Welwyn Garden City	139	112	5	5	261	—	—	—	1	1	3·83	2	2	—	1	5	19·16
Total Urban	3,131	2,967	140	119	6,357	63	33	2	1	99	15·57	82	50	2	2	136	21·39
RURAL—																	
Berkhamsted	42	36	3	2	83	1	—	—	—	1	12·04	2	—	—	—	2	24·08
Braughing	83	89	3	3	178	—	—	—	—	—	—	—	—	—	—	—	—
Elstree	132	116	3	10	261	2	1	—	1	4	15·33	3	1	—	1	5	19·16
Hatfield	164	168	4	5	341	5	3	—	1	9	26·39	5	5	—	1	11	32·25
Hemel Hempstead	108	94	6	5	213	1	1	1	—	3	14·08	3	1	1	—	5	23·47
Hertford	71	77	3	6	157	1	—	—	—	1	6·37	1	—	—	—	1	6·37
Hitchin	151	161	8	8	328	1	1	—	—	2	6·10	4	3	—	—	7	21·34
St. Albans	171	170	7	7	355	3	1	—	—	4	11·27	6	1	—	1	8	22·53
Ware	87	91	4	2	184	1	1	—	—	2	10·87	1	2	—	—	3	16·30
Watford	276	233	8	9	526	2	3	1	—	6	11·41	4	3	1	—	8	15·21
Welwyn	48	49	5	—	102	1	—	—	—	1	9·80	1	—	—	—	1	9·80
Total Rural	1,333	1,284	54	57	2,728	18	11	2	2	33	12·19	30	16	2	3	51	18·69
Total County	4,464	4,251	194	176	9,085	81	44	4	3	132	14·53	112	66	4	5	187	20·57

The Deaths of Legitimate and Illegitimate children respectively in the Urban and Rural Districts in the County are shown below as a rate per thousand of live births of each type.

Legitimate.	*Under 4 weeks.*	*Under 1 year.*
Urban Districts	15·74	21·65
Rural Districts	7·26	17·58
County	14·34	20·42

Illegitimate.	*Under 4 weeks.*	*Under 1 year.*
Urban Districts	11·58	15·44
Rural Districts	36·04	45·05
County	18·92	24·32

Table 10. (1951).

Details on Live Births and Infants Deaths in Districts.

	Live Births					No. of Infant Deaths (under four weeks)						No. of Infant Deaths (under one year)					
	Legitimate		Illegitimate		Total	Legitimate		Illegitimate		Total	Rate	Legitimate		Illegitimate		Total	Rate
	Males	Females	Males	Females		Males	Females	Males	Females			Males	Females	Males	Females		
URBAN—																	
Baldock	46	44	6	1	97	—	2	—	—	2	20·62	—	2	—	—	2	20·62
Barnet	158	144	8	7	317	4	1	—	—	5	15·78	5	3	—	—	8	25·04
Berkhamsted	70	70	6	1	147	—	2	—	—	2	13·60	2	3	1	—	6	40·82
Bishop's Stortford	90	82	8	2	182	—	1	—	—	1	5·49	1	1	—	—	2	10·99
Bushey	118	113	6	6	2·3	3	4	—	—	7	28·81	5	4	—	—	9	37·04
Cheshunt	192	192	7	4	395	6	3	—	—	9	22·78	6	5	—	—	11	27·85
Chorleywood	26	27	3	—	56	—	—	—	—	—	—	—	—	—	—	—	—
East Barnet	253	218	9	12	492	5	4	—	1	10	20·33	5	4	—	1	10	20·33
Harpenden	93	90	3	2	188	—	1	—	1	2	10·64	1	1	—	1	3	15·96
Hemel Hempstead	166	169	9	5	349	3	4	—	—	7	20·06	6	5	—	—	11	31·51
Hertford	99	91	3	2	195	2	—	—	—	2	10·26	3	1	—	—	4	20·51
Hitchin	149	139	10	8	306	3	2	—	—	5	16·31	3	4	—	—	7	22·88
Hoddesdon	113	83	3	9	208	5	—	—	—	5	24·04	5	2	—	—	7	33·65
Letchworth	172	153	7	5	337	—	3	2	—	5	14·84	3	3	2	—	8	23·74
Rickmansworth	165	169	3	7	344	3	2	—	—	5	14·53	3	2	—	—	5	14·53
Royston	31	32	2	2	67	1	—	—	—	1	14·93	1	2	—	—	3	44·78
St. Albans	369	332	14	10	725	8	6	—	—	14	19·31	12	8	—	—	20	27·59
Sawbridgeworth	34	24	—	3	61	1	—	—	—	1	16·39	1	—	—	—	1	16·39
Stevenage	68	53	4	1	126	—	—	—	—	—	—	1	—	1	—	2	15·87
Tring	50	19	1	—	70	3	—	—	—	3	42·86	3	—	—	—	3	42·86
Ware	65	72	4	1	142	1	—	—	—	1	7·04	1	2	—	—	3	21·13
Watford	494	474	22	27	1,017	8	6	—	—	14	13·77	12	7	—	—	19	18·68
Welwyn Garden City	152	156	6	6	320	4	4	—	—	8	25·00	8	4	—	—	12	37·50
Total Urban	3,173	2,946	144	121	6,384	60	45	2	2	109	17·07	87	63	4	2	156	24·43
RURAL—																	
Berkhamsted	40	46	1	4	91	—	—	—	—	—	—	—	—	—	—	—	—
Braughing	88	72	4	3	167	1	—	1	—	2	11·98	2	1	1	—	4	23·95
Elstree	134	122	5	5	266	1	3	1	—	5	18·80	1	3	1	—	5	18·80
Hatfield	173	146	9	2	330	—	1	—	—	1	3·03	—	2	—	—	2	6·06
Hemel Hempstead	87	84	5	4	180	1	2	—	1	4	22·22	1	2	—	1	4	22·22
Hertford	61	76	4	5	146	2	1	1	—	4	27·40	2	1	1	—	4	27·40
Hitchin	166	143	9	6	324	2	1	1	—	4	12·35	3	4	2	—	9	27·78
St. Albans	189	165	12	12	378	7	1	1	1	10	26·46	7	2	1	1	11	29·10
Ware	95	92	1	4	192	2	—	1	—	3	15·62	3	2	1	—	6	31·25
Watford	343	320	9	11	683	7	5	1	1	14	20·50	10	8	1	1	20	29·28
Welwyn	43	38	1	2	84	—	1	—	—	1	11·90	—	1	—	—	1	11·90
Total Rural	1,419	1,304	60	58	2,841	23	15	7	3	48	16·89	29	26	8	3	66	23·22
Total County	4,592	4,250	204	179	9,225	83	60	9	5	157	17·02	116	89	12	5	222	24·06

The Deaths of Legitimate and Illegitimate children respectively in the Urban and Rural Districts in the County are shown below as a rate per thousand of live births of each type.

Legitimate.	*Under 4 weeks.*	*Under 1 year.*
Urban Districts	17·16	24·51
Rural Districts	13·95	20·20
County	16·17	23·18

Illegitimate.	*Under 4 weeks.*	*Under 1 year.*
Urban Districts	24·24	36·36
Rural Districts	84·75	93·22
County	36·55	44·39

Table 11.

MATERNAL MORTALITY.

Number of Deaths of Mothers per 1,000 Births.

	Hertfordshire						England and Wales Rate
	Urban		Rural		County		
	Number	Rate	Number	Rate	Number	Rate	
1935–44 (average for ten years).	13	2·1	6	3·0	19	2·4	2·6
1945 . . .	7	1·1	4	1·7	11	1·2	1·8
1946 . . .	13	1·6	2	0·7	15	1·4	1·4
1947 . . .	4	0·5	2	0·7	6	0·5	1·2
1948 . . .	5	0·7	–	0·0	5	0·5	1·0
1949 . . .	2	0·3	1	0·4	3	0·3	1·0
1950 . . .	6	0·9	4	1·4	10	1·1	0·9
1951 . . .	1	0·2	2	0·7	3	0·3	0·8

The Registrar-General, in determining the maternal mortality rate, selects those deaths which are directly attributable to pregnancy or confinement. On this basis, there were ten maternal deaths in 1950 and 3 in 1951.

Whereas the Registrar General is concerned only with the deaths which are directly attributable to pregnancy or confinement, there is a standing instruction from the Ministry of Health that the County Medical Officer should submit a special report on all maternal deaths. To comply with this instruction one has, of course, to investigate every death in which there is any association with childbirth.

By a special arrangement with the Registrar-General, I receive immediate information of the death of all women of child-bearing age in this County. Where the death appears to be in any way associated with pregnancy or childbirth, reports are obtained from the midwife, doctors, and hospitals concerned with the case, and the file is sent to Mr. Reynolds, the County Obstetric Adviser, who completes the final section in the report in which the County Medical Officer is asked to say " whether the death could have been prevented by (*a*) better ante-natal supervision, (*b*) better obstetric facilities at delivery, (*c*) specialist treatment in hospital, (*d*) intelligent co-operation of patient ". Obviously, this opinion is more usefully given by a specialist obstetrician of consultant status.

TABLE 12.

DEATHS FROM CANCER OR MALIGNANT DISEASES.

(Per 1,000 Population.)

	Hertfordshire						England and Wales
	Urban		Rural		County		
	Number	Rate	Number	Rate	Number	Rate	Rate
1935–44 (average for ten years).	608	1·6	210	1·5	818	1·5	1·6
1945 . . .	723	1·8	235	1·7	958	1·8	1·9
1946 . . .	706	1·7	222	1·5	928	1·7	1·9
1947 . . .	731	1·8	254	1·7	985	1·7	1·9
1948 . . .	766	1·8	272	1·7	1,038	1·8	1·9
1949 . . .	780	1·8	258	1·5	1,038	1·7	1·9
1950 . . .	800	1·8	271	1·6	1,071	1·8	1·9
1951 . . .	796	1·8	231	1·3	1,027	1·7	2·0

TABLE 13.

HEART DISEASE DEATH-RATE.

(Per 1,000 Population.)

	Hertfordshire						England and Wales
	Urban		Rural		County		
	Number	Rate	Number	Rate	Number	Rate	Rate
1945 . .	1,199	3·1	410	2·9	1,609	3·0	3·4
1946 . .	1,133	2·8	405	2·8	1,538	2·8	3·3
1947 . .	1,261	3·0	492	3·3	1,753	3·1	3·5
1948 . .	1,214	2·8	404	2·5	1,618	2·8	3·2
1949 . .	1,303	3·0	502	3·0	1,805	3·0	3·6
1950 . .	1,421	3·2	527	3·1	1,948	3·2	3·8
1951 . .	1,538	3·5	587	3·2	2,125	3·4	4·1

Table 14.

Notifications of Infectious Diseases, 1950.

(Civilians only)

	Scarlet Fever	Whooping Cough	Diphtheria	Measles	Acute Pneumonia	Cerebro Spinal Fever	Acute Poliomyelitis	Acute Polio-encephalitis	Acute Encephalitis Lethargica	Dysentery	Ophthalmia Neonatorum	Puerperal Pyrexia	Para-Typhoid	Enteric or Typhoid	Erysipelas	Chicken Pox*	Malaria	Undulant Fever	Infective Hepatitis	Weil's Disease	Food Poisoning	Total for Districts
URBAN—																						
1. Baldock	4	19	—	143	1	—	1	—	—	—	—	—	—	—	3	—	—	—	4	—	—	175
2. Barnet	38	193	—	417	15	—	4	—	—	2	1	19	—	1	4	—	—	—	—	—	1	695
3. Berkhamsted	6	58	—	30	1	—	2	—	—	1	—	1	—	—	5	—	—	—	5	—	—	109
4. Bishop's Stortford	12	95	—	2	3	—	5	—	—	—	—	1	—	—	2	—	—	—	4	—	14	138
5. Bushey	36	46	—	28	3	—	4	—	—	1	11	12	—	—	1	—	—	—	—	—	—	142
6. Cheshunt	19	130	—	22	38	—	1	—	—	4	—	1	—	—	6	—	—	—	—	—	19	240
7. Chorleywood	3	—	—	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31
8. East Barnet	71	372	—	348	26	—	8	—	—	2	—	—	—	—	5	—	—	—	—	—	—	832
9. Harpenden	34	77	—	39	6	—	5	—	—	1	—	—	1	—	9	—	—	1	1	—	—	174
10. Hemel Hempstead	33	34	—	22	1	—	1	—	—	—	—	—	—	1	—	—	—	—	1	—	1	94
11. Hertford	17	74	—	14	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	109
12. Hitchin	20	6	—	388	11	—	2	—	—	1	—	—	—	—	3	35	—	—	—	—	—	466
13. Hoddesdon	7	22	—	4	1	—	3	—	—	1	—	—	—	—	4	—	—	—	—	—	39	81
14. Letchworth	15	52	—	598	12	—	3	1	—	1	—	—	—	—	4	53	1	—	6	—	1	747
15. Rickmansworth	20	48	—	374	3	—	1	—	—	1	—	—	6	—	—	—	—	—	—	—	4	457
16. Royston	—	—	—	2	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	3
17. St. Albans	58	217	—	643	10	—	2	—	—	—	—	1	1	—	9	—	—	—	29	—	1	971
18. Sawbridgeworth	4	31	—	5	1	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	43
19. Stevenage	3	3	—	137	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	146
20. Tring	6	16	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26
21. Ware	5	14	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22
22. Watford	89	267	—	207	15	—	8	3	—	1	16	22	1	—	11	—	—	—	39	—	2	681
23. Welwyn Garden City	58	66	—	349	—	—	1	—	—	—	—	9	—	—	1	—	—	—	—	—	1	485
Total Urban	558	1 840	—	3,805	152	—	52	5	—	16	28	66	9	3	68	88	1	1	91	—	84	6,867
RURAL—																						
1. Berkhamsted	6	21	—	5	1	—	1	—	—	—	—	—	—	—	—	—	—	—	3	—	—	37
2. Braughing	3	79	—	14	8	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	107
3. Elstree	21	15	—	86	6	—	2	—	—	12	—	—	—	—	—	—	—	—	2	—	—	144
4. Hatfield	51	140	—	59	5	—	3	—	—	—	—	—	—	—	2	—	—	—	—	—	16	276
5. Hemel Hempstead	23	42	—	24	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	6	97
6. Hertford	6	5	—	6	1	—	—	—	—	—	2	—	—	—	—	—	—	—	1	—	—	21
7. Hitchin	18	10	—	172	4	—	2	—	—	—	—	—	—	—	2	—	—	—	—	—	7	215
8. St. Albans	31	104	—	159	8	—	5	—	—	24	—	—	—	—	7	—	—	—	4	—	—	342
9. Ware	7	42	—	13	3	—	—	—	—	—	—	2	—	—	1	—	—	—	—	—	1	69
10. Watford	64	81	—	143	7	—	10	—	—	—	1	1	2	—	1	—	—	—	—	—	2	312
11. Welwyn	2	9	—	8	—	—	2	—	—	—	—	—	—	—	1	—	—	—	—	—	2	24
Total Rural	232	548	—	689	43	—	25	—	—	36	3	3	2	—	16	—	—	—	13	—	34	1,644
Total County	790	2,388	—	4,494	195	—	77	5	—	52	31	69	11	3	84	88	1	1	104	—	118	8,511

* Notifiable only in Baldock U.D., East Barnet U.D., Hitchin U.D., Hitchin R.D., and Letchworth U.D.

Table 15.

Notifications of Infectious Diseases, 1951.

(Civilians only)

		Scarlet Fever	Whooping Cough	Acute Polionyelitis		Measles	Diphtheria	Acute Pneumonia	Dysentery	Smallpox	Acute Encephalitis		Encephalitis	Enteric or Typhoid	Paratyphoid	Erysipelas	Meningococcal Infection	Food Poisoning	Puerperal Pyrexia	Ophthalmia Neonatorum	Chicken Pox*	Malaria	Undulant Fever	Infective Hepatitis	Weils Disease	
				Paralytic	Non-Paralytic						Infective	Post-Infectious														
	URBAN—																									
1	Baldock	8	40	—	—	18	—	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75
2	Barnet	43	76	—	—	261	—	17	9	—	—	—	—	—	1	4	2	10	27	—	—	—	—	—	—	460
3	Berkhamsted	19	60	—	—	291	—	3	4	—	—	—	—	—	—	—	—	1	10	—	—	—	—	2	—	379
4	Bishop's Stortford	18	83	—	—	271	—	5	—	—	—	—	—	1	—	2	—	1	32	23	—	—	—	2	—	391
5	Bushey	13	33	1	1	266	—	6	5	—	—	—	—	—	—	6	—	—	1	1	—	—	—	—	—	383
6	Cheshunt	88	71	—	—	580	—	35	8	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	791
7	Chorleywood	2	8	—	—	99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	109
8	East Barnet	45	247	—	1	809	—	14	8	—	—	—	—	—	1	3	—	—	1	—	346	—	—	—	—	1,475
9	Harpenden	7	124	—	—	318	1	5	2	—	—	—	—	—	—	4	—	—	3	—	—	—	—	—	—	464
10	Hemel Hempstead	19	21	—	1	230	—	—	18	—	—	—	—	—	—	—	—	—	13	—	—	—	—	—	—	302
11	Hertford	20	87	—	—	242	—	32	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	4	—	387
12	Hitchin	17	112	—	—	202	—	5	6	—	—	—	—	—	—	2	—	—	10	—	—	—	—	2	—	356
13	Hoddesdon	10	135	—	—	376	—	18	—	—	—	—	—	—	—	3	—	3	—	—	—	—	—	—	—	545
14	Letchworth	4	67	—	—	72	—	12	—	—	—	—	—	—	—	1	—	6	1	—	—	—	—	—	—	163
15	Rickmansworth	10	66	—	1	374	—	—	1	—	—	—	—	—	—	3	—	—	—	1	—	—	—	—	—	456
16	Royston	—	23	—	—	52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75
17	St. Albans	26	174	1	—	355	1	25	10	—	—	—	—	—	1	6	3	—	—	—	—	—	—	65	—	667
18	Sawbridgeworth	2	2	—	—	71	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	2	—	79
19	Stevenage	2	18	—	—	27	—	2	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	50
20	Tring	6	18	—	—	208	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	232
21	Ware	1	28	—	—	90	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	120
22	Watford	62	159	3	1	1,409	1	37	22	—	—	1	—	1	—	6	2	2	13	—	—	—	—	66	—	1,785
23	Welwyn Garden City	31	98	—	—	303	—	5	8	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	447
	Total Urban	453	1,750	5	5	6,924	3	231	101	—	—	2	—	2	3	43	7	25	113	25	346	—	—	143	—	10,181
	RURAL—																									
1	Berkhamsted	16	21	—	—	139	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	177
2	Braughing	5	121	—	1	201	—	16	—	—	—	—	—	—	2	—	1	—	—	—	—	—	—	6	—	353
3	Elstree	15	40	1	—	55	—	2	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	134
4	Hatfield	19	69	—	—	369	—	19	176	—	—	2	—	—	—	3	—	3	—	—	—	—	—	—	—	660
5	Hemel Hempstead	6	37	—	—	107	—	5	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	157
6	Hertford	6	92	—	1	118	—	5	5	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	229
7	Hitchin	7	120	1	—	248	1	11	39	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	429
8	St. Albans	30	91	—	—	371	—	21	49	—	—	—	1	1	—	5	—	1	2	—	—	—	—	16	—	588
9	Ware	1	100	—	—	248	—	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	368
10	Watford	52	175	2	3	441	—	8	5	—	—	—	—	—	—	1	1	5	1	—	—	—	—	—	—	694
11	Welwyn	3	7	—	—	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24
	Total Rural	160	873	4	5	2,311	1	105	293	—	—	2	1	1	2	10	2	10	3	—	—	—	—	30	—	3,813
	Total County	613	2,623	9	10	9,235	4	336	394	—	—	4	1	3	5	53	9	35	116	25	346	—	—	173	—	13,994

* Notifiable only in East Barnet Urban District.

We must recognize that we have not, as yet, found the answer to behaviour and control of Poliomyelitis, and that years of relative immunity lead to an increase in the number of susceptible persons in the population at risk, which may, in turn, lead to a higher incidence in years to come. In my, fortunately limited, experience of this disease during the past 10 years in Hertfordshire, I have noted that communities which have been heavily attacked in one year tend to escape in succeeding years.

The fact that there was only one notified case of undulant fever in 1950 and none in 1951, is interesting in relation to the widespread prevalence of abortus infection in the dairy herds in this County. The identity of the organism which causes undulant fever in the human being and epidemic abortion in cattle has been established, but no satisfactory explanation has been forthcoming to account for the wide disparity between the prevalence of infection in milk and the number of human cases notified.

The increase in the number of cases of food poisoning from forty-four in 1949 to a hundred and eighteen in 1950 deserves note. Our modern way of living has made this an increasingly formidable menace to our health and justifies the recent attention to food hygiene in school canteens and in public eating places.

NATIONAL HEALTH SERVICE ACT 1946.

Notes on Statistical Return to Ministry of Health (Form L.H.S. 27).

Each year the Health Department completes for the Ministry of Health a Return in the form of a statistical summary of the work done in connection with what used to be the Maternity and Child Welfare Services. Members of the Committee may find a digest of the information given in the following table a useful indication of the work in this field.

	1949.	*1950.*	*1951.*
Births :—			
Notified	9,708	9,442	9,565
Live	9,520	9,262	9,357
Still	188	180	208
Premature :—			
Notified	514	465	557
Born :—			
At home	105	102	114
In nursing homes	47	34	26
In hospitals	362	329	417
Ophthalmia Neonatorum :—			
Notified	17	30	25
Midwifery :—			
Domiciliary :—			
Employed by local Health Authority	89	99	99
Employed by Hospital Management Committees	6	6	6
Private Practice	19	17	22
Institutional :—			
Employed in hospitals	134	109	115
Employed in nursing homes	27	20	20
Gas and Air Analgesia :—			
Midwives qualified to administer gas and air analgesia	210	192	215
Ante-Natal Clinics :—			
Sessions per month	116	103	103
Attendances made	10,997	9,374	9,417
Infant Welfare Centres :—			
Sessions per month	320	317	328
Attendances made	160,480	155,475	158,902
Health Visitors :—			
Number employed (part-time)	112	118	114
Representing whole-time equivalent	30	$33\frac{5}{12}$	$32\frac{5}{12}$

	1949.	1950.	1951.
Home Nursing :—			
Number employed (whole-time) . .	23	19	20
Number employed (part-time) . . .	117	115	112
Representing whole-time equivalent .	$67\frac{5}{12}$	$48\frac{5}{6}$	$68\frac{7}{12}$
Day Nurseries :—			
Approved places : 0–2 years . . .	393	390	403
2–5 years . . .	668	671	668
On register at 31st December : 0–2 years .	372	356	333
2–5 years .	746	735	759
Average daily attendances : 0–2 years .	311	299	260
2–5 years .	616	590	563
Home Helps :—			
Employed whole-time	110	105	73
Employed part-time	242	438	317
Mother and Baby Home (Campions) :—			
Accommodation—Beds	15	15	15
Cots	9	12	12
Average Stay (days) :—			
Ante-Natal	34	21·4	6·8
Post-Natal	33	43·2	35·5
Nurseries and Child Minders Act, 1948 :—			
Premises registered	4	5	7
Minders registered	3	5	7

SECTION 21—HEALTH CENTRES.

In last year's Report, I discussed at some length the difficulties which had been encountered in trying to provide a comprehensive Health Centre in a new Housing Estate, and concluded with the warning that if something were not urgently done to simplify the procedure precedent to erecting a comprehensive Health Centre, the Health Authorities would be obliged to build Part III. Centres in isolation, with the result that our dreams of a link between preventive and curative medicine would be shattered. My fears on that score have not materialized, because we have not even been able to give serious consideration to building a Part III. Centre !! This is a surprising statement in a County which is saddled with four New Towns and two very large new housing estates.

Some years ago it was accepted that a population of over 10,000 justified the provision of a special building for the County Health Services. In such a building, one would have expected to find each week probably two Welfare Centres, a busy Ante-natal Clinic, several Dental Sessions, School Minor Ailment Clinics, Speech Therapy, Ophthalmic Clinics, Orthoptics, Orthopædics, and perhaps other specialized Clinics.

When the planning of the New Towns was begun, we based our programme of Health Centres on pre-1948 experience.

In 1950, a Development Corporation was discussing the final layout of the centre of a new Neighbourhood Unit in which we had provisionally earmarked a site for a new Health Centre. The Planners were proposing to give the Health Building preference over another type of public building on the grounds that the building which was in greatest use should have the better position. This led to my being asked for a firm statement on the use which would probably be made of this Centre.

The Neighbourhood Unit in question was being added to an existing town, which was already served by a central and well-established Health Centre at which a full range of Local Health Authority Clinics was held. When considering the new building, it was recognized that it must be a subsidiary Centre, since the principal one could serve the new area for the more specialized clinics, e.g., Speech Therapy, Ophthalmic, Orthoptic.

The Orthopædic Clinic for the town was held at the local hospital. A large Maternity Unit had led to the decline of domiciliary midwifery and to attendances at the central Ante-natal Clinic. There was no prospect of getting enough Dental Officers to set up a local clinic to serve the new neighbourhood. Minor Ailment Clinics throughout the County had diminished, and were now patronized either by children with conditions which could easily be treated by the School Nurse in the schools, or by children who were called up by the Medical Officer for special examinations and who could, for the most part, be expected to travel to the Central Clinic.

There seemed to be little likelihood that the building would be used oftener than once or twice a week. Clearly there was no justification on any score for pressing a claim for a new Centre and, indeed, it seemed rather unreasonable even to consider the idea if it could not be more fully used.

The problem, however, had to be faced, since one knew that it would arise in some sixteen to twenty similar units which were scheduled to appear at various places in the County. The answer obviously was to find some building which would serve our purpose, but which could in whole or in part be useful to other Organizations when it was not being used as a Health Centre.

It so happened that, elsewhere in the County, a school built just before the war in a rapidly growing neighbourhood had been planned with a generous suite of rooms for school medical inspection. These rooms soon came to be used for the local Infant Welfare Centre, despite the fact that they were not on the ground floor, were badly laid out, and were much too small for the purpose.

Suggestions that this Centre might be moved to more spacious premises were resisted by the staff, voluntary workers, and mothers on the plea that the inconvenience was offset by the advantage of having their own premises. The Head Master of the Infant School, too, was anxious that the Centre should continue because he had noted that children who had attended the Welfare Centre settled very much more happily when they came to his school than those who saw the building for the first time when they were admitted as entrants.

With this experience in mind, I discussed with the Education Officer the possibility of attaching to a new school a special unit designed primarily to meet the requirements of the Health Services, but laid out in such a way that the majority of the Health Annexe space would be useful for school purposes when it was not being used by the Health Department. The Education side were enthusiastic about this idea because it offered them the occasional use of a small Hall and associated side rooms, which would be of great value for physical education in wet weather, meetings of Parent-Teacher Associations, and special class-rooms. The County Architect advised that a building of this kind could be erected at a relatively low cost if it were designed and built at the same time as the school. There would, of course, be a substantial saving also on the elimination of wasteful " school medical inspection space " from the design of the school building.

The idea was then discussed with officers of the Ministry of Education representing both the medical and administrative sides. Here, too, it was favourably received and, despite the strict limitations of capital expenditure which were in force, we were given an assurance that we would receive every possible encouragement to erect experimental Health Centres of this kind.

It is intended that the annexe should, if possible, be associated with an Infant School. The distances which infants can be expected to travel are comparable to those which a mother can be expected to push a perambulator. Unfortunately, however, it requires two Infant Schools to serve a neighbourhood of 10,000, and these are obviously best placed at opposite poles of the neighbourhood. We have not yet been able to put the idea of a Health Annexe into practice, because no conveniently sited school has so far been included in the building programme.

If some satisfactory solution to the problems of Health Centre practice is found, it may be possible to design the Health Annexe in such a way that it could be used for doctors' consulting rooms in the mornings and evenings, and for health and education purposes in the afternoons. One would then have indeed solved the problem of the unused building.

But, quite apart from the question of general practice, the idea is an attractive one for many reasons. One grumbled in the past at being asked to carry out medical inspections in inconvenient premises. The battle for school medical inspection rooms was being won before the war but now, with the post-war rise in the birthrate and—in this County—with the very heavy immigration rates, every inch of space in our schools is required. It is not reasonable to insist that a school medical room and waiting room which may be used only once a term should be kept sacrosant, and consequently these rooms have been appropriated for educational purposes.

In schools with a Health Annexe there would be no need to provide school medical inspection space in the school building, and the school would have neither the pretext nor the temptation to dispute the Health Department's primary right to reserve the annexe for school medical inspection and other health purposes when necessary.

There are, of course, other ways in which the specialized accommodation required by the Health Services can be associated with the unspecialized rooms and services which they require when in session. In one New Town, for example, it was suggested that the Health Centre should form a wing of a Community Centre. The Health Wing would provide accommodation for the Doctor, Dentist, Health Visitor and Midwife, but the Assembly Hall and other facilities could be rented from the Community Centre. One had it in mind, too, that if it became practical to introduce the idea of studying the family unit on the lines of the Peckham Health Centre, the Medical Suite attached to the Community Centre would serve both purposes.

Another idea has been discussed in relation to this problem in a large community which developed in the years between the wars. The district was largely unplanned and, when planning came into being, it was found impossible to allot a suitable site for use as a Health Centre. For some years our Welfare Centre has met in rented premises which serve both as a Church and as a Church Hall. It was known that the church authorities had plans and a site for improving their accommodation when this became possible. Discussions with the authorities have taken place to see whether it would be practical to design a Church Hall which had on one side of the Hall specialized rooms necessary for the religious functions, and on the other a suite of rooms reserved for use in conjunction with the Hall as a Part III Health Centre. The idea would be financially attractive both to the Church and to the Health authorities.

A similar idea is under discussion with the Trustees of a Memorial Hall which is to be built in a village in the County. At present, the Welfare Centre meets in the Scouts' Hut which has to serve the village for most of its social functions. It is quite unsuitable and inadequate for both purposes. A new Memorial Hall has been designed so that the layout of the small rooms in relation to the main Hall will give an ideal " traffic flow " when the building is in use as a Welfare Centre. The Health Visitor's Room which will be used when the Welfare Centre is in session will be provided with an external door, and can be locked off from the rest of the Hall. With this arrangement, the room can be used by a visiting Medical Officer for special examinations, by the Health Visitor for any special interviews, or by the District Nurse as a Duty Room Office at which she can do Dressings Sessions and hold Ante-natal Clinics. This room could be used without opening up the main Hall, or even when the main Hall is in use for some other purpose.

SECTION 22—CARE OF MOTHERS AND YOUNG CHILDREN.

Infant Welfare Centres.

TABLE 16.

INFANT WELFARE CENTRES WITH 1949 COMPARISONS.

	No. of Centres	Sessions Held	Doctors' Attendances	No. of Children who Attended	Children's Attendances	
					Total	Average per Session
1949.						
Infant Welfare Centres . . .	90	3,361	2,758	19,778	156,234	46·5
Weighing Centres	19	287	—	811	4,246	14·8
Totals	109	3,648	2,758	20,589	160,480	—
1950.						
Infant Welfare Centres . . .	86	3,384	2,755	20,421	147,826	43·4
Weighing Centres	23	436	—	1,298	7,649	17·6
Totals	109	3,820	2,755	21,719	155,475	—
1951.						
Infant Welfare Centres . . .	96	3,553	2,879	21,904	151,265	42·6
Weighing Centres	16	393	—	1,383	7,637	19·4
	112	3,946	2,879	23,287	158,902	—

TABLE 17.

ANTE-AND POST-NATAL CLINICS WITH 1949 COMPARISONS.

	No. of Clinics	Sessions Held	Doctors' Attendances	No. of Patients who Attended		Total Attendances	Average Attendance per Session
				Ante-Natal	Post-Natal		
1949. County Council Clinics . .	36	1,184	888	2,715	718	11,776	10·0
1950. County Council Clinics . .	33	1,601	898	2,451	600	10,409	6·5
1951. County Council Clinics . .	35	1,223	903	2,264	696	10,700	8·7

Ophthalmic Clinics:—These Clinics, which are provided by the Education Committee, are attended by cases referred from the M. and C.W. Centres. During 1950, 582 attendances were made by children under five, and 143 pairs of spectacles were prescribed (the number of attendances made up of 244 cases attending for the first time and 338 re-examinations).

During 1951, 739 attendances were made—220 being for first examination and 519 for re-examination. 166 pairs of spectacles were prescribed. Information is not now available on the number of pairs of spectacles supplied, as these are obtained through the National Health Service; but there is now a very slight delay in the dispensing of most prescriptions of glasses, and it may be safely assumed that none of the patients referred to above waited any undue length of time.

Day Nurseries.

		Number of Approved Places at 31st December, 1951.		
		0–2 years.	*2–5 years.*	*Total.*
Barnet	53 Wood Street	20	50	70
Boreham Wood	Shenley Road	32	40	72
Bushey	London Road.	30	50	80
East Barnet	29 Station Road	23	27	50
Hemel Hempstead	Creche at Nursery School, Lawn Lane.	24	—	24
Hertford	10 Queens Road	20	28	48
Hitchin	Creche at Nursery School, York Road.	15	—	15
Letchworth	1 Norton Way North	20	30	50
New Southgate	Brunswick Park	30	50	80
Rickmansworth	The Bury	14	26	40
St. Albans	Hall Place Gardens	20	30	50
St. Albans	Royal Road	30	50	80
Waltham Cross	157 High Street	20	20	40
Ware	Bowling Road	10	40	50
Watford	Cassiobury Park	20	50	70
Watford	Leggatts Way	20	60	80
Watford	St. Albans Road (Beechwood)	15	35	50
Welwyn Garden City.	Church Road	20	32	52
Welwyn Garden City.	Woodhall Lane	20	50	70
		403	668	1,071

At the end of 1950 the total number of approved places was 1,061 ; at the 31st December, 1951—1,071. During 1951, the Day Nursery at Beulah Hall was closed and Beechwood opened with an increase of 15 places. A reduction of 5 places was made at Woodhall Lane Nursery.

Medical Inspections at Day Nurseries.

	1950.	*1951.*
Number of children inspected	1,429	1,217
Re-inspections	921	670

Defect or Disease.	*No. of Defects requiring treatment.*		*No. of Defects requiring observation, but not treatment.*	
	1950.	*1951.*	*1950.*	*1951.*
Uncleanliness	9	9	—	2
Heart.	3	2	24	21
Lungs	8	5	37	41
Eyes	15	25	27	22
Ears	13	8	4	10
Nose	8	11	49	51
Throat	27	20	123	106
Skin	26	34	39	68
Alimentary System	1	6	4	11
Teeth	22	28	3	11
Nervous System	4	5	17	5
Deformities.	101	61	88	95
Other	32	28	11	6
Totals	269	242	426	449

Report of Day Nurseries Supervisor for 1950.

During this year the steady progress in our work has been maintained, and the staff are experiencing a deep satisfaction, because they are getting such good results from their efforts.

Over 55 per cent of the children come from families where, through various circumstances, there is only one wage-earner, 36 per cent are recommended by doctors and Health Visitors because of special need which may be due to bad housing, or because the child is physically or emotionally maladjusted : The remaining 9 per cent are children of essential health workers or children whose fathers are in H. M. Forces.

Before any child is admitted to a day nursery, the case history is checked by the health visitor, the welfare officer or the almoner. After admission, each case is re-checked monthly. We are very grateful to these members of the child welfare team for their co-operation and help.

I have always believed that a good day nursery has three functions :—

(1) To care for the child ;
(2) To provide parentcraft training ;
(3) To train staff.

This report deals with each section in this order.

The Children.

Through the County Almoners, some young babies of unmarried mothers are admitted to the nurseries on their discharge from " Campions ". This policy is sometimes the cause of great criticism by psychiatrists and Medical Officers of Health outside this County but we believe that these mothers should be encouraged to keep their babies with them and to work for their maintenance. The Children's Officer supports us in this because she has found that when the child of an unmarried mother is admitted to a residential nursery, the close contact is broken, the mother enjoys her full freedom again, and later on, she is reluctant to undertake the full responsibility for her child. I was interested in reports from Birmingham and Kent, where it is thought that day nursery provision has reduced the illegitimate infant mortality rate to the level of the infant mortality rate of legitimate children.

We are also admitting children from homes where active cases of tuberculosis are awaiting admission to sanatoria. It is good to feel that through giving these children the right food, sufficient rest, and the open-air life provided by the nurseries, their health is being safeguarded. Before admission the child is certified by the Chest Physicians as being free from any risk of transmitting infection.

Children are being referred to us by the Child Guidance Clinics, with good results. For instance, a child of 2 years 3 months who refused to walk, the unwanted fourth child of a problem family, was walking within six months of admission. Another child, of $4\frac{1}{2}$ years, who had many behaviour problems, which were causing conflict in the home, improved so much that she was able to go happily to school on reaching 5 years, instead of being taken into the care of the local authority, as was at first thought would be necessary. The nursery staff care for the child and help the mother, the health visitor or welfare officer visits the home and co-operates with the nursery, and so, through good team-work, these cases are obtaining the help they need. Two psychiatrists, who are studying at Hill End Child Guidance Clinic, are spending one session each week at two of our nurseries, observing the children and studying their case histories ; we look forward to their reports with great interest.

Many temporary cases are being admitted during the mother's illness or confinement, when there is a relative to care for the child at evenings and week-ends. This service is relieving the pressure on short-stay residential nurseries, and, as well as being more economic, is much better for the child. Such temporary cases need a great deal of individual attention and careful handling to prevent fretting ; frequent admissions of this kind call for unlimited patience on the part of the nursery staff, and an atmosphere of calm security in the nursery.

The Parents.

The Parents' meetings and Fathers' Toy Making and Repairing Classes are still making good progress, although much more needs to be done among the parents. A daily menu card and a monthly weight chart are hung in each nursery and these are of great interest to the parents, as well as being of educational value. It is through the comparison of their children with other children that the spirit of competition is engendered in the parents, which is of such great value in parentcraft training. Sometimes a child is weighed each Monday morning and Friday evening, and if the nursery staff can prove that the child gains weight during the week and loses it during the week-end, then the mother can usually be persuaded to continue with the nursery methods when the child is at home. This is the answer to those who say that the mother should be given money to stay at home and care for her own child ; it is the contact with a good nursery which makes all the difference to these families.

I am happy to report that our parentcraft training has now been extended beyond the actual nursery parents. Until recently prospective adopters were referred to the Mothercraft Training Society for parentcraft training, prior to receiving a baby for adoption. Such cases are now referred to our day nurseries, and this service is being greatly appreciated. Some young wives need much more help than others, and after receiving their baby they often call in to the nursery to report progress. I was rather amused recently to find that one young wife returned home and straightaway instructed her husband in the making up of an infant's feed, so that he could take his turn when the baby arrived.

Young mothers with first babies are being referred to our nurseries by Health Visitors and doctors for instruction in bathing, feeding, laundering, etc. It is surprising how quickly they gain confidence under expert supervision, and we are glad to be of service to the Health Visitor, who has not time for such individual teaching in the home.

We are just beginning to help, too, in the rehabilitation of some problem families. In a recent case the Health Visitor went into a home which was deplorably dirty. She helped the mother to clean the house, and then the mother and her two children attended the nursery for three days, in an effort to teach her personal cleanliness. The young baby had an abscess on the hand, and was covered with septic sores, but his condition greatly improved with cleanliness, and we hope that a lasting impression has been made.

The Staff.

This report has oulined the type of work now being undertaken by our nursery staff. It can be understood, therefore, that the senior staff need to be extremely well qualified if they are to cope successfully with the families in their care. In order to assist them in their task, regular meetings are held each month for the Matrons and Wardens, and twice yearly for Deputy Matrons and Nursery-Trained Nurses.

Eleven suitable candidates were entered for the Supplementary Wardens' Course which was held last May, and twelve untrained nursery assistants were entered for the Senior Course, which was held in September. Eighteen Matrons and Deputy Matrons attended a week's refresher course in Barnet in October. These courses are arranged by the Education Department, in conjunction with the Health Department. In a day nursery the " Warden " is responsible to the Matron for arranging a satisfactory programme for the children in the 2 to 5 age group, so that they are suitably occupied during the day.

Students' Training.

Much has been done this year to improve the training of the stundent in both her practical and theoretical work. Before entering for the examination of the National Nursery Examination Board, a County examination is arranged, which includes a written and oral test and observation of the students' practical

work. The student has to reach a certain standard at this mock examination before being allowed to enter for the real one. This has proved of great value, and during 1950 28 students were entered for the examination and 21 were successful in obtaining the certificate of the N.N.E.B. Of these :—

18 remained in our day nurseries as staff nurses,
3 transferred to nursery schools,
1 transferred to a residential nursery,
3 went on to hospital training,
1 entered for teachers' training, and
2 entered private nursery work.

We are glad to know that by providing training for nursery students, we are able to help them to bridge the gap between school and some of the professions. We also realize that through their nursery training our students are going to be all the better wives and mothers in the future.

In closing, I would like to pay tribute to all the staff for their excellent work and close co-operation during the year. They have given unstintingly of their time and labour ; they have raised money for necessary play material and equipment, they have served the nursery children and parents faithfully and patiently, and have shown a real sympathy with them in their need. I am very grateful to them all for the very fine work they are doing.

Report of Day Nurseries Supervisor for 1951.

In a recent report compiled by Dr. John Bowlby for the World Health Organization the evidence of many psychologists has been collected which in their opinion proves that young children suffer a great deal of emotional harm if they are separated from their mothers during the first three years of life. The question of problem families and neglected children is discussed at some length and it is considered that however bad the home may be, every effort should be made to keep the family together. Where the mother has to go into hospital it is thought better for the small children to be put with a foster-mother than in a residential establishment. In the light of this evidence it is useful to consider the value of day nursery work in helping to keep the family unit together.

During this year our day nurseries have coped with an increasing number of temporary cases where the children are admitted while the mother is away in hospital but where there has been a relation willing to care for the child at night and over the week-end. Although the child may be fretful at first in the day nursery, he has the comfort of his own familiar surroundings and his own family at night and week-ends, and so is helped to bear the separation from his mother.

There has been one interesting case recently, requiring the provision of both day nursery and foster-mother care. The father and mother are both in their late twenties and are mentally backward. They have four children under 4 years of age. The mother has been taking the older child to a nursery school and the other three children to a day nursery where she has remained with the children, helping to bath and feed them. She has returned home in the afternoon to do her cleaning and washing, and has then collected the children later in the day.

She was rushed to hospital one night with a miscarriage, the ambulance taking the children to a near-by Home Help, as the husband was incapable of being left with them.

The next day the Welfare Officer of the Children's Department arranged for the Home Help to keep the older child and arranged for a foster mother to have the other three children during the mother's absence. The foster mother was to take the children to the day nursery each day. After one night one child, aged 1½, had proved so troublesome that the foster-mother refused to keep her, but one of the day nursery staff volunteered to have her instead.

After another week the foster-mother was completely worn out looking after the twins and her own two children, and said she could not keep the twins after the Friday. The Matron of the Nursery took the twins home with her for the week-end and on the Monday, the mother having returned from hospital was thought by her doctor to be well enough to have her family with her as long as the children were in the day nursery all day. One of the nursery staff volunteered to collect the children each morning and take them to the Nursery, the mother calling for them in the evening. A male Wefare Officer from the Children's Department is trying to help the father.

During the year several of the nursery staff have helped in similar instances which shows that, however comprehensive our social services may be there will always be a need for voluntary help of this kind.

In helping with the pre-problem and problem families, our day nurseries are endeavouring to preserve the family unit which is felt to be so important. There is much work to be done in this field for it is estimated that there are 8,000 problem families in this country affecting 320,000 children. The N.S.P.C.C. report that they were asked to help with 69,000 neglected children last year.

Our Parents' Meetings continue to be of great value in preserving the close co-operation necessary between parents and staff. We have been greatly helped this year by County and Local Councillors, who have come to the meetings to discuss their work. It is a great help for the parents to know of the services already provided and available to them. The Nurseries very much miss the free services of the Crown Film Unit which used to provide an interesting film show thrice monthly.

We have had a very successful year in our students' training scheme, 47 students were entered for their Nursery Nurse's Diploma and 41 were successful. Of these :—

20 remained in our own day nurseries.
4 transferred to nursery schools.
7 transferred to residential nurseries.
9 entered for nursing training.
2 entered for teachers training.
3 obtained posts in private families.
2 married.

Six of our newly qualified Nursery Nurses are in General Nursing Training at the Watford Peace Memorial Hospital and I understand that Matron would welcome more from the same source.

Twelve suitable candidates were entered for the supplementary Wardens' Course held April, 1951, and 16 untrained Nursery Assistants were entered for the Senior Course which was held in September.

The usual staff meetings have been held during the year and have been a great help to us all.

The outstanding event of the year was the completion of the Beechwood Day Nursery building and the transfer to it of the children from Beulah Hall. Beulah Hall started to be used as a day nursery in 1940 and accommodated 35 children from 2 to 5 years of age. Because of the poor facilities this nursery was not a training school for students.

After the war the Church Authorities wanted the hall back and in 1949 the Ministry of Health gave approval to the plans for a new building.

The building is the only one of its type and is of similar architecture to the new Hertfordshire schools. It was carefully planned to be labour saving and easily supervised and has since proved to be so.

Beechwood has been approved by the Ministries of Health and Education to be a training school and 3 students are already in training.

There is accommodation for 50 children, 15 under 2 years of age and 35 aged 2 to 5 years.

The 35 children from Beulah Hall watched the new building grow and moved in on October 16th, 1951, and were very quickly at home. The 15 new children were admitted gradually and the nursery has been full ever since.

Beechwood has received visitors from all over the world, who have been interested in the planning and materials used and the heating system, etc.

Officials from the Ministries of Health and Education have not only visited the nursery themselves, but have also sent their overseas visitors to see it.

In closing I would again like to pay tribute to the excellent work of the staff. It has been a pleasure to continue working with them.

The foregoing should give some idea of the type of work which our Day Nurseries are now doing. The days when the Day Nurseries were exploited by the irresponsible mother have long since gone. The Day Nursery is now playing a very important part in the structure of the social services. Their existence makes it possible for the single or widowed mother to keep her child or children and go out to earn, knowing that they will be well looked after during the day. The alternative in most cases would be for the mother to confess herself beaten and ask the local authority to take over responsibility for the child. This would be neither in the interests of the child, nor in the interests of the ratepayers in the County. The Nurseries could probably be justified in this score alone, and there is considerable force behind the arguments of those Councillors who say that if the service is such a good one it should be extended to all the towns in the county, and not limited to the 10 as at present. On more strictly public health grounds however, the Day Nursery has taken its place as a practical training and demonstration ground. In the past this aspect of their work was incidental and confined to those mothers who, for other reasons, had a child in a Day Nursery. More recently we have tended to develop this idea and to prescribe a stay in the Day Nursery, often with the mother in attendance, as a means of restoring the health of the child who has suffered from an unskilled mother.

One often finds that criticisms of our Day Nurseries are based on misconceptions, or a confusion between the Day Nursery and similar types of institution. Sometimes, too, prejudices which arose from the fact that the nurseries were established to release women for industry and were not so carefully controlled as now, persist. I am confident that anyone who visits a Day Nursery and sees the work that is being done there will be satisfied that it is serving a useful purpose. I am confident, too, that a scrutiny of the records relating to the children in the Nursery will convince members that their use is now limited to really deserving cases. As it will be seen from the Supervisor's Reports a great deal of work has been put into building up a good team spirit amongst the Staff of the Nurseries. These efforts have been very hampered by the continual criticism of the Day Nursery Service—particularly of its cost, which is undoubtedly heavy, We have now reduced the numbers and types of children in the Day Nurseries to the minimum, and in fairness to the staff it should now be decided whether the Day Nursery Service shall for some time be carried on in its present form.

Dental Services, 1950–51.

Report of the County Dental Officer.

Once again it has to be reported that a further decline of the County Dental Service has taken place through the resignation of two more whole-time dental officers during 1950, only one of whom was replaced in the autumn of 1951.

This further depletion of staff has resulted in a reduction of the proportion of the cases recommended for dental treatment by the medical officers at the maternity and child welfare clinics which can be accepted, and as it was found

that the expectant and nursing mothers were able to secure the attention they needed more easily from practitioners under the National Health Service than were the very young children, it was considered that our limited resources could best be employed by concentrating on the infant welfare cases. It has also been borne in mind that rendering as many as possible of these children dentally fit would help to reduce the numbers found to require treatment in the youngest age groups at school dental inspections, and thus permit the officers to devote more time to the treatment of the older children. Dental treatment, to be of lasting benefit, must be as complete as possible, and in this connection it may be noted that of the children who received attention in 1950 93 per cent were given full treatment, the corresponding figure for 1951 being 94·9 per cent.

It is to be regretted that the service it is now possible to offer to maternity and child welfare patients has fallen so short of that envisaged when the Health Act came into force. The proposals then submitted to the Minister, and subsequently approved, included the provision of facilities for the routine dental examination of all expectant mothers attending ante-natal clinics, of nursing mothers who had not received attention as ante-natal cases, and of the children attending the welfare centres, with full treatment to be available in all cases where it was found to be required. Although a complete service of this kind now appears to be a somewhat utopian conception, every effort should be made to provide the maximum facilities possible, as the need certainly still exists. The importance of dental inspection as part of a routine procedure at the maternity and child welfare clinics is stressed, as the mothers often seek treatment from practitioners only for the relief of pain or when teeth become unsaveable. Similarly, the children are frequently taken too late for conservation treatment to be successfully carried out, in fact, the mothers are often not aware that attention is needed at all until the matter is brought to their notice by a dental officer. The staff is not available for this work to be carried out nor to cope with the amount of treatment which should be done, and thus, as already indicated, the more urgent cases only can be seen.

In May, 1951, the National Health Service Act was amended and patients are required to pay charges for dentures ranging from £2 to £4 5*s*. The amendment did not contain any exemption for expectant and nursing mothers, and the only way they can obtain assistance to meet the charges is to apply to the National Assistance Board. The County Dental Service was precluded from providing the dentures through the persistence of staff shortages, and the ruling was given that the County Council should not accept financial responsibility for these cases. It is interesting to note that under arrangements made during 1947 and 1948 for financial assistance in respect of dentures for expectant and nursing mothers, the average cost to these patients was £2 6*s*. and there were no instances of the foregoing of the dentures through inability to pay the amount at which the mothers were assessed.

The problem of giving real priority to those who stand in particular need of dental care has reached such proportions that the only way of solving it effectively is for it to be dealt with at national level. The lengthy negotiations over the remuneration for whole-time public dental officers were concluded during 1951 when the Dental Whitley Council (Local Authorities) published their recommendations. The scales were adopted by the County Council and led to the appointment of the dental officer in the autumn, already mentioned, together with the receipt of several inquiries regarding posts, so that it is expected that two or three additional appointments can be made early next year. To what extent the position will improve it is not yet possible to estimate, but some clinics have already been reopened and others are being made ready; it is to be hoped that a reasonably adequate service may eventually be restored.

It has been possible to keep some of the centres open during the past two or three years only because of the continued services rendered by part-time

officers, and it is incumbent to record due appreciation of their public-spirited action in the face of financial loss. Their support in the extremely difficult task of trying to provide a priority dental service under present conditions is acknowledged with gratitude.

Particulars of the work carried out during 1950 and 1951 are given in the following tables :—

	1950.	*1951.*
Maternity.		
Number of mothers examined	138	74
Number of mothers needing treatment	123	70
Number of mothers treated	101	53
Number of mothers made dentally fit	66	40
Extractions	171	76
Anæsthetics—Local	18	8
General	60	26
Fillings	61	43
Scalings or scaling and gum treatment	23	9
Silver nitrate treatment	—	—
Dressings	14	8
Radiographs	—	—
Dentures provided—Complete	—	—
Partial	—	—
Child Welfare.		
Number of children examined	745	725
Number of children needing treatment	563	522
Number of children treated	487	416
Number of children made dentally fit	453	395
Extractions	815	690
Anæsthetics—Local	28	26
General	358	319
Fillings	224	250
Scalings or scaling and gum treatment	5	3
Silver nitrate treatment	184	99
Dressings	22	23
Radiographs	—	—

Note.—Arrangements are made with National Health Service practitioners and hospitals for the provision of dentures and the taking of radiographs when necessary.

Illegitimate Births.

It has been felt in some quarters that the altered approach to the problem of illegitimacy might encourage these births. It is pleasing to find that these fears are groundless as far as this County is concerned as the figures for the year 1945 to 1951 illustrate.

Year	Total Births	Illegitimate Births	Percentage of Illegitimate Births
1945	8,972	742	8·27
1946	10,793	672	6·23
1947	11,275	491	4·36
1948	9,961	500	5·02
1949	9,693	432	4·46
1950	9,259	377	4·07
1951	9,433	396	4·20

Unmarried Mothers.

The number of unmarried mothers brought to the notice of the Almoners showed a slight increase over the figure of 300 for 1949 — 334 in 1950 and 331 in 1951. The number placed in the County Council Hostel at Campions was 66 in 1950 and 68 in 1951.

The demand upon the accommodation at Campions continued to fluctuate during these two years, but the average occupancy was higher in the earlier

months of 1951 than in previous years. However, shortage of staff—there was no deputy Matron during the latter half of that year—restricted the number of admissions during that period, and required vacancies to be sought for the girls in Voluntary Homes outside the County.

The Home Sub-Committee gave considerable thought to the type of case to be admitted to the County Home. It had been intended that the provision of a Hostel for the unmarried mother would not only help her by making available accommodation, but that also, while she was living there, the contacts made with the Council's Officers would enable her to obtain advice and assistance to rehabilitate herself within the community, either with or without her baby. It had been considered that the best work would be done with those having first babies, and that therefore Campions should only accept this type. However, this instruction has proved impossible to operate, as there is no other accommodation readily available in the County for these girls, and all types have had to be taken into Campions. The Welfare Department have helped when they could, but their accommodation was not very suitable for young babies. The Sub-Committee were very concerned that this mixing of the young and possibly immature with the older often "hard-boiled" girl should take place in Campions, and it is hoped that during 1952 it will be possible to accept the few difficult cases into Welfare accommodation prepared for them.

In the Spring of 1951 the Authorities of the Foundling Hospital offered accommodation for unmarried mothers and their babies in a house they hoped to have ready for occupation later in the year. Difficulties arose, however, in regard to the design of the house, and early in 1952 the offer was withdrawn.

The following reports of the two Almoners dealing mainly with the unmarried mothers give some details of their work during the past two years :—

Miss Morfey who deals with unmarried mothers throughout the County, excluding the South-west, Dacorum, and South, reports :—

During the year 1951 the volume of work has varied little from the preceding year—225 new cases were dealt with as against 237 in 1950, but the totals under supervision including old cases were 509 in 1951 against 511 the previous year. These figures are a surprise to me as day to day working appears to vary so considerably—very rushed periods alternating with occasional periods of slackness, and one of the difficulties of the work is budgeting for its requirements as regards proportion of my time, vacancies in ante- and post-natal employment, and vacancies at Campions. Another difficulty in this type of work is the irresponsibility and unreliability of a proportion of the girls, many of whom gratefully accept offers of help, but when plans have been completed do not keep appointments or notify me that they have altered their minds, and a good deal of time is thus wasted in making arrangements for employment, admission to Campions, etc., which do not mature.

49 girls were admitted to Campions, and 25 to Voluntary Homes (some of these very young girls unsuitable for Campions, and others during a period of several weeks when residents in Campions were limited to 5). Help in other ways was arranged in 391 cases. 23 girls have subsequently married, of whom 13 married the father of their child.

Applications from would-be adopters continue to pour in, but in view of the length of time some have had to wait (over a year) and the growing waiting list, it was decided at the end of the year to close the waiting list for a time. Liaison with the Day Nursery Supervisor who arranges training in infant care for prospective adopters has been very helpful.

In 3 cases, owing to the acute anxiety caused by their pregnancy, girls had had mental breakdowns and in 2 instances had attempted to take their own lives. One of these has been admitted to Campions (as she is now fully recovered), and her baby is to go to a Residential Nursery while she resumes work and the care of her first child. One is still pregnant and had to be admitted

to a Mental Hospital as a voluntary patient. The other was employed in a Maternity Hospital during pregnancy, and subsequently had twins, one of whom died. The girl has returned to her mother until such time as the baby (still in hospital) is of a size to come to Campions with his mother who has now decided that she wants to keep him, but who cannot return to her own home with the child.

During the year an agreement was reached with the Crusade of Rescue, the leading organization in this country dealing with Roman Catholic girls. They share the general concern over the entry into England of large numbers of young Irish girls, either already pregnant or becoming pregnant over here shortly after arrival, and agree that the proper course is not to offer facilities (other than emergency help) for them to remain in England, but to persuade them to accept offers of Mother and Baby accommodation in their own country. It is not an easy policy to pursue, but has already proved partially successful.

Of the 49 girls admitted to Campions, 19 returned home with their babies and only 13 adoptions were arranged ; in 1950 the same number were adopted out of a total of 44, and only 7 returned home. This perhaps confirms my impression that parents are not so antagonistic as they were and are more prepared to accept a daughter's illegitimate child without the intense feeling of " loss of face " as formerly. In all such cases help as regards affiliation or maintenance and Day Nursery (if the mother intends to go to work) are offered.

The problem of girls needing residential help, but more suitable for Welfare than Campions, has been recurrent, and some, whom all are agreed were not suitable had to be accepted at Campions owing to lack of Welfare vacancies. It is hoped, however, that in the near future this situation will be to some extent improved, and more Welfare accommodation available. It is probable that now—3½ years after the initiation of the Health Act—we are beginning to feel more acutely its repercussions, in that the type of girl formerly dealt with in the institution—feeble-minded, or amoral, who knows no limit to conception—is being brought to our notice for the third or fourth time, some of these having been helped in the past at Campions. Two girls in Campions were referred to the Mental Health Section, one being certified and the other placed under voluntary supervision. Three absconded and deserted their babies. Three Irish girls temporarily accommodated at Campions were returned to suitable Mother and Baby Homes in their own country.

For 10 girls domestic posts have been found where they could have the baby with them, and good reports have been received of them all from their employers. It is, of course, by no means every girl who is capable of, or suitable for such a solution, but with careful selection it seems to prove a sound one in cases where a girl cannot return to her own home.

It is probably true to say that at least 80 per cent of girls in pregnancy see adoption as the only solution to their problems, and one feels that Campions completely justifies itself by the fact that ultimately adoption is decided upon by comparatively few. We learn that in another County, which has no Mother and Baby Home, adoptions are arranged by the Superintendent Health Visitor direct from hospital, when the baby is a fortnight old, often as the only solution—and wonder what effect the invaluable commodity of time for reflection and the example of others (as at Campions) might have upon some of the girls who part with their children at this early age.

One girl was quite decided in pregnancy that she would not want her baby and could not keep it. At Campions, however, after the baby's arrival she wept at the idea of adoption while still feeling that she could do nothing else as her father refused to accept the baby. Accordingly a Residential Nursery vacancy was provided, but within a fortnight of the girl's return home she wrote to say that her father now agreed to her having the child and might she collect him. It is unlikely that she will be able to go to work and the nearest Day Nursery is too far to be of much help—also she is anxious to look after her

own child, which we feel is to be encouraged. Accordingly financial help in the form of a weekly grant was arranged through one of the Children's Societies, as the putative father could not be traced to be tackled regarding maintenance.

One girl—German—formerly at Campions, whose baby was, for a time, with a foster-mother, has returned to her parents in Germany with her child. The putative father, a Rumanian in this country, has been interviewed and a formal agreement drawn up by which he contributes to the child's maintenance. This he has so far done faithfully and by an arrangement with the National Council for the Unmarried Mother the money is transferred quarterly to the girl in Germany.

Miss Howard Jones and Miss Ballance, who work in the South-west, report as follows :—

79 such cases were dealt with during 1951, 75 in 1950, the majority requiring long term case work. This is work which needs considerable time to be spent on it, since so many aspects must be borne in mind when helping the unmarried mother to plan her future. Frequently parents must be seen as well as the girl herself.

There would seem to be an increasing number of unmarried mothers between the ages of 17 and 21 years, the majority of whom have formed no close relationship with the putative father, who may often be considerably older. The reason may well be the girl's unwillingness to be thought a " poor sport ". It is these girls who, if they need hostel accommodation, may be better placed in hostels which take only first cases.

Campions continues to meet an essential need. The problem of the unmarried mother having her third child has arisen in two instances. In one case the girl had previously been at Campions and in the other at a Diocesan Hostel. This situation underlines the need for alternative accommodation giving long term supervision in these cases, which might act as a possible deterrent in the future, and in order to prevent such cases from mixing with first cases. Observation of the problem of the unmarried mother over a period of time has given rise to the view that help and advice and reasonably comfortable hostel conditions do not encourage a girl to have further illegitimate children. The continued lapses seem to occur because of some innate weakness and irresponsibility which no amount of rehabilitation can help. The difficulty is that the existence of this weakness cannot be conclusively proved at first.

Only two foreign single girls who became pregnant before arrival in this country were referred to the Almoners during 1951. Both were returned to their own countries by the Home Office, though the machinery is slow and unwieldly. The Diocesan Worker reported no other such cases, and this is remarkable in an area where there are a number of foreigners working in hospitals, if not private houses. The Almoners have also dealt with several Irish girls—only three were known to have become pregnant before leaving Eire, the others having been resident here for some years. Two unmarried mothers were returned to Eire through the Crusade of Rescue and the Catholic Social Welfare working in Dublin. This method depends entirely on the willingness of the girl to return and is therefore not infallible.

NURSING SERVICES.

(*Sections 23, 24 and 25.*)

In my 1949 Report I referred to the happy relationship which continued to exist between the statutory nursing services and the County Nursing Association.

The arrangement made in 1948 by which the Local Health Authority enjoyed, at a nominal charge, the use of the houses, furniture, and cars owned by the County Nursing Association, fell due for review in the summer of 1951. By that time the affairs of the County Nursing Trust Fund had reached a stage at which it became possible to negotiate the sale of some of their assets.

It had also become apparent that, as far as the administration of the County Nursing Services was concerned, there was little or no justification for keeping the Local and Central Committees of the Nursing Association in being. After a very full and friendly discussion in which the County Treasurer and I took part, the County Nursing Association Executive decided to recommend that the District Nursing Association should be disbanded, and that the County Nursing Association should be reconstituted as the Body appointed to manage the Trust Fund. It is intended that the mode of election to this Body should ensure that there is representation of local opinion throughout the County, so that the merits of the various projects which will be considered by the Trust Fund should be discussed in relationship to the needs of the County as a whole, and that its monies will be spent in accordance with the views of persons representing the communities in which these monies were collected.

The County Nursing Trust has been invited to send two members to the Health Committee. It is intended that the County Council will be represented on the Controlling Body of the Fund. I hope that the County Medical Officer or County Nursing Officer will be eligible as representatives.

And so, in less than fifty years, the County Nursing Association has come and gone, having in its brief existence achieved its purpose and left a tradition which will for long be a memorial to its work. In many ways we shall be the poorer for its passing. One must admit that on occasions it was difficult to steer a course between the " big-business " methods necessary in running an organization of the size of the County Council and the kindly, human, and intimate approach of the County Nursing Association. A Health Department, in its dealings with the public, must do everything possible to retain these very qualities, and the graciousness and courtesy which characterized the meetings of the County Nursing Association were not without their influence on me and the members of my staff who were privileged to attend them.

It is to be hoped that some day the Dowager Lady Salisbury, who played an active part in guiding the affairs of the County Nursing Association from start to finish, may find time to put on record the history of district nursing in Hertfordshire. The story would be a notable contribution to the annals of voluntary service in Hertfordshire.

NURSING STAFF AT 31ST DECEMBER, 1950 AND 1951.

(Figures in brackets denote number with H.V. Certificate.)

	Whole-time.				*Part-time.*			
	1950.		*1951.*		*1950.*		*1951.*	
Administrative	5	(5)	5	(5)	—	—	—	—
Health Visiting and School Nursing	53	(53)	52	(52)	2	(1)	2	(2)
Health Visiting, School Nursing, Midwifery, and Home Nursing	53	(16)	51	(16)	1	—	1	—
School Nursing	2	—	2	—	1	—	2	—
Tuberculosis Health Visiting	6	(3)	7	(4)	—	—	—	—
Domiciliary Midwifery	16	(1)	15	(1)	—	—	—	—
Domiciliary Midwifery and Home Nursing	34	(2)	38	(5)	2	—	—	—
Home Nursing	19	—	20	—	14	—	13	—
Home Nursing, School Nursing, and Health Visiting	4	—	3	—	2	—	1	—

WORK OF THE ADMINISTRATIVE NURSING STAFF.

	1949.	*1950.*	*1951.*
Routine inspections and special visits to Midwives and District Nurses	883	911	996
Visits to Health Visitors	144	170	180
Other special visits	598	474	442
Visits to Secretaries of Local Nursing Associations and interviews	425	523	460
Visits to Infant Welfare Centres, Clinics, and Schools	418	379	313
Visits to Nursing and Old Persons' Homes	144	159	135
Visits to Nursery Schools	35	17	41
Visits to Maternity Homes and Ante-Natal Hostels	35	75	101
Attendance at meetings	251	332	270
Number of talks given	63	51	34

SECTION 23—MIDWIFERY SERVICE.

Report of the County Nursing Officer.

The increased hospitalization of expectant mothers and Doctors counting booked cases as Maternity, has had the effect that was foreseen and reduced the number of midwifery cases in all branches of the domiciliary field. The full-time midwives in the direct employ of the County Council, together with the pupil midwives placed with the approved teachers, could undertake 780 cases per annum on the basis of 66 cases per midwife and an additional 24 cases per pupil—the case load suggested in the Rushcliffe report. The total number of cases attended by the full-time midwives in 1951 was 583 ; the number of cases taken by individual midwives ranging from 21 to 96, averaging 58. In the areas where a nurse does home nursing and midwifery work only, the average number of cases per nurse in 1951 was 18. In the more widespread district where home nursing, midwifery, health visiting, and school work is undertaken the lowest number of cases attended by any one midwife was 4 while 3 had more than 30 cases during the year. It would appear that apart from the densely populated areas it is uneconomical to continue the employment of full-time midwives unless they can assist with other duties, e.g., clinic, health visiting or clean general nursing care.

Many of the hospitals have a system of screening so that first and fifth or more pregnancies and expectant mothers with a bad medical history are the only ones confined in hospital. The screening is not very rigid, however, in some areas where the bed shortage is not too acute and this means that the flow of cases to hospital continues and the tendency is for domiciliary midwifery work to decrease. This has a marked ill effect upon the skilled nurse-midwife who likes to have a certain amount of midwifery with her nursing work and it has, in some instances, caused nurses to leave this County for work elsewhere.

It has been observed that the majority of the midwives are reluctant to undertake training of pupils, as they consider that this further reduces the personal interest which up to now they have had in their cases. The time appears to be fast approaching when the Central Midwives Board and the Ministry may decide to revert to one complete midwifery training period again and to reduce the number of domiciliary cases required as qualification to sit the Part II examination.

The difficulty in this respect is further increased by the number of training schools within the County requiring to have training material for the pupils which they accept, as this system needs one midwife in the thickly populated areas to carry out the bulk of the midwifery work so that she can train the pupils. The effect of this is that other nurses have their cases reduced and lack of interest creeps in. This County has a number of such training schools which have presented these particular difficulties.

It is difficult for domiciliary midwives to maintain a keen interest in patients who, confined in hospital and discharged before the 14th day, require a few extra days nursing care, as this deprives the midwife of a great deal of joy in the work and there is a particular dissatisfaction when she has no knowledge of the return of mother and baby until the information is obtained from some casual source. This position has been rectified considerably, as hospitals and nursing homes now notify midwives direct when a patient is likely to be discharged before the end of the puerperium.

Drug administration has created a few anomalies as Midwives could only order Pethidine for a particular expectant mother. This order has been altered so that Pethidine can now be passed on to another expectant mother if, because of transfer to hospital or any other reason, it is not used for the mother for whom it was first obtained.

The transport difficulties are easier now that new cars are more readily obtainable, although many cars are in need of extensive repair or replacement.

Ophthalmia Neonatorum.

Opinion on the value of instilling eye drops into the eyes of newly born babies is somewhat varied. In February, 1951, some domiciliary midwives in selected areas in the County were asked to discontinue using the drops during the following six months and at the end of that period to state their opinion on the result. The impression of the midwives was that on the whole there was little change in the condition of the babies' eyes ; in fact, some of the midwives stated that the eyes had been better because there was not even the reaction which sometimes occurred with the use of some of the prophylactics.

On the whole the midwives prefer a mild prophylactic such as collosol argentum or albucid.

	1949.	*1950.*	*1951.*
Number of Midwives who practised in the County during the year	400	359	358
Number practising on 31st December	275	251	262
Number of these qualified to administer analgesics in accordance with the requirements of the Central Midwives Board—			
(*a*) In Institutions	115	93	110
(*b*) Domiciliary	95	107	109
Number of ante-natal visits paid by Midwives	23,221	16,540	18,356
Total number of confinements attended by Midwives	11,596	10,261	10,419
(*a*) In Institutions	8,890	7,699	7,876
(*b*) Domiciliary	2,706	2,562	2,543
Number of domiciliary confinements attended—			
(*a*) By Midwives alone	1,791	1,813	1,892
(*b*) As Maternity Nurses	915	749	651
Number of medical aid notices issued (hospital and domiciliary)	690	449	497

Table 18. Midwives and their Work for the Year 1950.

District	Live Births (Registrar's Figures)		Total Confinements attended by Midwives		Infant Deaths			Notifications: Medical Aid		Notifications: Stillbirth		Maternal Deaths (Midwives' Domiciliary Cases)	Midwives employed by Local Supervising Authority		Midwives employed by Hospital Boards		Midwives in Private Practice		Total Number of Midwives	
	Legitimate	Illegitimate	As Midwife	As Maternity Nurse	No. of Deaths Under 1 year (Registrar's Figures)	Rate per 1,000 Live Births	Midwives' cases (Domiciliary) under 14 days	Mother	Child	As Midwife	As Maternity Nurse		Domiciliary	Institution	Domiciliary	Institution	Domiciliary	Institution		
Urban.																				
1. Baldock	95	5	18	18	4	40·00	—	2	2	—	1	—	2	—	—	—	—	—	2	1
2. Barnet	327	23	989	148	5	14·29	—	2	—	10	9	—	3	—	—	15	—	2	20	2
3. Berkhamsted	150	5	23	39	4	25·80	1 (–P)	4	1	—	—	—	2	—	—	—	—	—	2	3
4. Bishop's Stortford	171	11	683	80	2	10·99	—	5	—	15	4	—	2	—	—	13	2	—	17	4
5. Bushey	228	9	851	22	2	8·44	—	6	1	11	1	—	4	—	—	10	—	—	14	5
6. Cheshunt	342	12	70	90	8	22·60	—	12	2	—	2	—	5	—	—	—	1	—	6	6
7. Chorleywood	37	1	—	9	2	52·62	—	—	—	—	—	—	1	—	—	—	2	—	3	7
8. East Barnet	505	11	77	40	9	17·43	1 (–P)	24	4	1	—	—	3	—	—	—	—	—	3	8
9. Harpenden	192	4	22	179	5	25·51	—	5	—	—	3	—	2	—	—	4	2	—	8	9
10. Hemel Hempstead	340	10	680	72	7	20·01	1	4	2	13	7	—	2	—	—	7	—	—	9	10
11. Hertford	199	5	396	41	1	4·90	—	12	3	3	3	—	2	—	—	6	—	—	8	11
12. Hitchin	286	15	938	242	4	13·29	—	—	—	12	9	—	2	—	—	14	—	2	18	12
13. Hoddesdon	211	7	42	107	6	27·52	—	11	1	—	—	—	2	—	—	—	—	3	5	13
14. Letchworth	286	10	14	58	4	13·51	—	1	—	—	2	—	1	—	—	—	—	—	1	14
15. Rickmansworth	381	13	121	50	10	25·38	1	12	4	2	3	—	4	—	—	—	—	—	4	15
16. Royston	67	8	34	120	4	53·33	1 (–P)	8	1	1	6	—	1	—	—	2	1	1	5	16
17. St. Albans	680	40	656	84	24	33·31	2	78	17	11	2	—	5	—	—	13	1	4	23	17
18. Sawbridgeworth	64	2	26	14	1	15·15	—	6	1	—	—	—	1	—	—	—	—	—	1	18
19. Stevenage	90	1	19	10	—	—	—	1	—	—	1	—	2	—	—	—	—	—	2	19
20. Tring	56	6	18	4	1	16·12	—	3	—	—	—	—	2	—	—	—	1	—	3	20
21. Ware	139	14	30	8	4	26·14	—	9	1	—	—	—	2	—	—	—	—	—	2	21
22. Watford	1,001	37	1,308	240	24	23·12	2 (2P)	120	22	25	8	—	—	—	6	19	3	6	34	22
23. Welwyn Garden City	251	10	498	152	5	19·16	—	1	—	5	7	—	3	—	—	6	—	1	10	23
Total for Urban Districts	6,098	259	7,513	1,827	136	21·39	9 (5P)	326	62	109	68	—	53	—	6	109	13	19	200	
Rural.																				
1. Berkhamsted	78	5	8	3	2	24·08	—	2	—	—	—	—	2	—	—	—	—	—		1
2. Braughing	172	6	49	29	—	—	—	13	—	1	—	—	4	—	—	—	—	—		2
3. Elstree	248	13	87	15	5	19·16	—	5	1	—	—	—	3	—	—	—	1	—	4	3
4. Hatfield	332	9	23	60	11	32·25	—	1	—	1	1	—	6	—	—	—	—	—	6	4
5. Hemel Hempstead	202	11	30	27	5	23·47	—	4	—	—	—	—	3	—		—	—	—	3	5
6. Hertford	148	9	42	11	1	6·37	—	4	2	—	—	—	4	—	—	—	—	—	4	6
7. Hitchin	312	16	78	21	7	24·38	1 (–P)	6	—	1	—	—	11	—		—	1	—	12	7
8. St. Albans	341	14	207	54	8	22·53	—	4	1	3	3	—	5	—		—	1	—	6	8
9. Ware	178	6	42	20	3	16·30	—	9	1	—	1	—	3	—	—	—	—	—	3	9
10. Watford	509	17	66	34	8	15·21	2 (1P)	5	—	—	1	—	4	—	—	—	1	1	6	10
11. Welwyn	97	5	12	3	1	9·80	—	3	—	—	—	—	1	—	—	—	—	—	1	11
Total for Rural Districts	2,617	111	644	277	51	18·69	3 (2P)	56	5	6	6	—	46	—	—	—	4	1	51	
Total for Urban Districts	6,098	259	7,513	1,827	136	21·39	9 (5P)	326	62	109	68	—	53	—	6	109	13	19	200	
Total for County	8,715	370	8,157	2,104	187	20·57	12 (7P)	382	67	115	74	—	99	—	6	109	17	20	251	
			10,261					449		189										

P = Premature.

Table 19. Midwives and their Work for the Year 1951.

District	Live Births (Registrar's Figures)		Total Confinements attended by Midwives		Infant Deaths			Notifications: Medical Aid		Notifications: Stillbirth		Maternal Deaths (Midwives' Domiciliary Cases)	Midwives employed by Local Supervising Authority		Midwives employed by Hospital Boards		Midwives in Private Practice		Total Number of Midwives	
	Legitimate	Illegitimate	As Midwife	As Maternity Nurse	No. of Deaths Under 1 year (Registrar's Figures)	Rate per 1,000 Live Births	Midwives' cases (Domiciliary) under 14 days	Mother	Child	As Midwife	As Maternity Nurse		Domiciliary	Institution	Domiciliary	Institution	Domiciliary	Institution		
Urban.																				
1. Baldock	90	7	11	10	2	20·62	—	—	—	—	—	—	2	—	—	—	1	—	3	1
2. Barnet	302	15	1,156	131	8	25·04	—	—	—	21	5	—	3	—	—	20	1	1	25	2
3. Berkhamsted	140	7	20	29	6	40·82	—	4	3	—	—	—	3	—	—	—	2	2	7	3
4. Bishop's Stortford	172	10	681	73	2	10·99	—	1	1	9	5	—	2	—	—	11	2	—	15	4
5. Bushey	231	12	829	23	9	37·04	—	13	1	3	1	—	3	—	—	10	—	—	13	5
6. Cheshunt	384	11	95	78	11	27·85	2 (1P)	21	3	1	4	—	5	—	—	—	1	—	6	6
7. Chorleywood	53	3	—	15	—	—	—	—	—	—	1	—	1	—	—	—	1	—	2	7
8. East Barnet	471	21	74	25	10	20·33	—	12	3	5	—	—	2	—	—	—	1	—	3	8
9. Harpenden	183	5	29	162	3	15·96	—	2	1	2	1	—	2	—	—	4	1	—	7	9
10. Hemel Hempstead	335	14	640	49	11	31·51	3 (2P)	5	4	20	3	—	3	—	—	9	—	—	12	10
11. Hertford	190	5	440	36	4	20·51	—	9	—	9	1	—	2	—	—	6	—	—	8	11
12. Hitchin	288	18	896	166	7	22·88	—	1	—	16	9	—	3	—	—	15	—	1	19	12
13. Hoddesdon	196	12	32	81	7	33·65	—	2	1	1	5	—	2	—	—	—	—	4	6	13
14. Letchworth	325	12	20	50	8	23·74	—	—	—	—	—	—	1	—	—	—	—	—	1	14
15. Rickmansworth	334	10	103	72	5	14·53	1 (–P)	14	2	—	4	—	3	—	—	—	2	—	5	15
16. Royston	63	4	18	142	3	44·78	—	3	1	—	4	—	1	—	—	1	—	1	3	16
17. St. Albans	701	24	646	100	20	27·59	1 (–P)	61	12	10	3	—	4	—	—	13	—	3	20	17
18. Sawbridgeworth	58	3	23	9	1	16·39	—	3	—	2	—	—	1	—	—	—	—	—	1	18
19. Stevenage	121	5	18	19	2	15·87	—	—	—	—	—	—	2	—	—	—	—	—	2	19
20. Tring	69	1	21	2	3	42·86	—	1	2	—	—	—	2	—	—	—	1	—	3	20
21. Ware	137	5	30	8	3	21·13	—	8	4	—	—	—	3	—	—	—	—	—	3	21
22. Watford	968	49	1,413	194	19	18·68	—	171	56	41	4	—	—	—	6	18	1	7	32	22
23. Welwyn Garden City	308	12	526	96	12	37·50	—	8	1	7	1	—	3	—	—	8	1	1	13	23
Total for Urban Districts	6,119	265	7,721	1,570	156	24·43	7 (3P)	339	95	147	51	—	53	—	6	115	15	20	209	
Rural.																				
1. Berkhamsted	86	5	17	12	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2	1
2. Braughing	160	7	48	15	4	23·95	—	14	—	—	—	—	4	—	—	—	—	—	4	2
3. Elstree	256	10	84	16	5	18·80	—	9	1	1	1	—	3	—	—	—	1	—	4	3
4. Hatfield	319	11	28	55	2	6·06	—	2	—	—	2	—	6	—	—	—	2	—	8	4
5. Hemel Hempstead	171	9	33	25	4	22·22	2 (1P)	3	—	—	—	—	3	—	—	—	—	—	3	5
6. Hertford	137	9	29	17	4	27·40	2 (2P)	7	2	—	—	—	4	—	—	—	—	—	4	6
7. Hitchin	309	15	73	22	9	27·78	—	3	1	1	1	—	11	—	—	—	—	—	11	7
8. St. Albans	354	24	223	69	11	29·10	—	7	—	3	1	—	5	—	—	—	—	—	5	8
9. Ware	187	5	38	6	6	31·25	—	3	3	—	—	—	3	—	—	—	—	—	3	9
10. Watford	663	20	269	30	20	29·28	—	7	1	3	3	—	4	—	—	—	4	—	8	10
11. Welwyn	81	3	16	3	1	11·90	—	—	—	—	—	—	1	—	—	—	—	—	1	11
Total for Rural Districts	2,723	118	858	270	66	23·22	4 (3P)	55	8	8	8	—	46	—	—	—	7	—	53	
Total for Urban Districts	6,119	265	7,721	1,570	156	24·43	7 (3P)	339	95	147	51	—	53	—	6	115	15	20	209	
Total for County	8,842	383	8,579	1,840	222	24·06	11 (6P)	394	103	155	59	—	99	—	6	115	22	20	262	
			10,419					497		214										

P = Premature

Gas and Air Analgesia.

Of the 262 Midwives who were practising in the County at the end of 1951, 127 were in domiciliary and 135 in hospital practice. All the domiciliary Midwives employed by the County Council were trained in the use of gas and air, and 81·5 per cent of the hospital Midwives.

The following Table shows for 1950 and 1951 the number of institutional and domiciliary births respectively, and the number and percentage of those in which Gas and Air Analgesia was used.

	Total Confinements attended by Midwives acting as—		*Gas and Air Analgesia given.*			
	Midwives.	*Maternity Nurses.*	*Midwives.*		*Maternity Nurses.*	
Institutional.						
1950 . .	6,344	1,355	5,937	(93·6%)	1,111	(82·0%)
1951 . .	6,687	1,189	6,227	(93·1%)	934	(78·6%)
Domiciliary.						
1950 . .	1,813	750	1,479	(81·6%)	577	(77·0%)
1951 . .	1,892	651	1,571	(83·0%)	502	(77·0%)

Early in 1949, we were invited by the Central Midwives Board to undertake a very interesting piece of research. Some years ago, Dr. John Elam (our Honorary Adviser in Obstetric Analgesia) invented a modification of the standard Gas and Air set. The modification—known as the C.M. Attachment—was given a very full trial in the Maternity Departments to which he had access in this County ; but since the portable Gas and Air apparatus is primarily designed for use in domiciliary midwifery, the value of this modification was limited so long as it could be used only under medical supervision in a Maternity Hospital.

The Central Midwives Board were asked to authorize its use in domiciliary midwifery. They were not prepared to give a general dispensation to Midwives, but they invited me to put forward proposals for a controlled experiment in its use in this County. These proposals were accepted and in January, 1950, I submitted a detailed study of the results of the use of Gas and Air with the C.M. Attachment in 210 confinements.

This report was forwarded by the Central Midwives Board to the Technical Committee which advises them on analgesia. In the fulness of time, the observations of the Technical Committee were received. They were critical of the fact that our series recorded that 30·5 per cent of the infants or mothers suffered from transient ill-effects. It was suggested that this percentage was substantially higher than would be expected with a normal gas and air apparatus.

By this time we had collected a further series of 246 cases in which the percentage showing distress was 12·6, but, despite this, at the suggestion of the Central Midwives Board, the C.M. Attachments were withdrawn from the Midwives and a new series of 210 cases in which the standard Gas and Air apparatus only was used was collected. In this series, 23·8 showed an unfavourable reaction. The results were forwarded to the Central Midwives Board in March, 1951, and were in turn passed to the Technical Committee.

The Central Midwives Board have, for the time being, authorized the Midwives in this County to resume the use of the C.M. Attachment, in order that further experience and evidence of its value can be obtained. Forty-seven gas and air sets have been adapted for use with the C.M. Attachment and domiciliary midwives attending more than fifteen confinements a year have been given instruction in the administration of analgesia by this method.

Gas and Air analgesia in domiciliary midwifery has, for many years, been a special interest of the Health Committee and its predecessor—the Maternity and Child Welfare Committee.

At this year's joint meeting of the British and Irish Medical Association, there was a plenary session devoted to the subject of "Pain". Mr. F. N. Reynolds

(our Honorary Obstetric Adviser) was invited to contribute a Paper at this session, and chose as his subject "The Relief of Pain in Childbirth". He contended that the standard of relief given to mothers attended by Midwives only was not as high as it could—and should—be. He quoted figures from Hertfordshire to illustrate what could be achieved where the Local Health Authority, the administrative Nursing and Medical staff, and the Midwives worked together to provide mothers with the fullest possible measure of relief. Mr. Reynolds emphasized the importance of the Local Health Authority appointing someone with a special interest in this subject who could be made responsible for furthering and fostering schemes for improving analgesia in domiciliary practice—someone to whom analgesia was something more than one facet of a busy administrative life. Again, he quoted experience in Hertfordshire—where Dr. John Elam held an appointment as Honorary Obstetric Analgesist—as a practical example of the soundness of his advice.

No one knows better than I the extent to which anything Hertfordshire may have achieved in this field is due to Dr. Elam. To him, the popularizing of the use of Gas and Air in midwifery has become something of a crusade. No effort is too great to make and no result too small to be worth-while if it does anything to further this cause. Dr. Elam, with characteristic modesty, however, made a point recently of asking me to put on record his appreciation and gratitude for all that the County Council has done to support him since he first began using Gas and Air Analgesia in this County in 1933. He feels that, without the support of the authorities, little could have been achieved, and is confident that, now that analgesia is established in popular esteem, the Local Health Authorities will continue to support any improvements in technique or any new developments and methods of proven value.

Gas and Air is, apart from drugs, the only form of analgesia available to midwives in domiciliary practice. The apparatus involved is bulky, heavy, and awkward, and there is a constant search for improved methods of giving relief to the mother during delivery without adversely affecting the progress of the confinement.

One of the more hopeful of these new methods is the use of Trilene, a new anæsthetic which is now extensively used by the medical profession. It is used under medical supervision by midwives in certain maternity wards. So far, no Trilene inhaler has been approved by the Central Midwives Board as suitable for use by domiciliary midwives.

A great deal of the preliminary work on the use of Trilene in midwifery was done at the Wellhouse Hospital under Dr. Elam's guidance, and the Committee can be assured that, as soon as Trilene is approved for use by midwives, it will be introduced to the domiciliary midwifery service in this County.

MIDWIVES.

(Position at 31st December.)

	No. practising.		*No. qualified to administer Gas and Air.*	
	Institutional.	*Domiciliary.*	*Institutional.*	*Domiciliary.*
1949	161	114	115	95
1950	129	122	93	107
1951	135	127	110	109

USE OF GAS AND AIR APPARATUS IN DOMICILIARY PRACTICE.

		Confinements.			
		No. attended by :		*No. in which Gas and Air given.*	
	No. of sets available.	*Midwives.*	*Maternity Nurses.*	*Midwives.*	*Maternity Nurses.*
1949	73	1,791	915	1,356 (75·7%)	621 (67·9%)
1950	73	1,813	749	1,479 (81·6%)	577 (77·0%)
1951	73	1,892	651	1,571 (83·0%)	502 (77·0%)

Relaxation in Pregnancy and Childbirth.

In recent years, increasing attention has been paid to the study of relaxation in pregnancy and in childbirth. The idea is not new. It has no doubt been used by individual doctors and midwives since obstetrics became an art, and it certainly was formalized and introduced as a special aspect of physical education at least twenty years ago.

Interest in this subject, however, has been stimulated by post-war publications, and the question of its efficacy is now very much in the public eye and in the minds of those of us who have a responsibility for the welfare of the parturient mother. One of the Assistant County Medical Officers (Dr. McCabe), who has now unfortunately left the Service, was particularly interested in this subject, and set out not only to introduce it as widely as possible at her Ante-natal Clinics but also to make a careful study of the results. Her report was too full for inclusion here but, before leaving, she was good enough to condense her findings as follows :—

For nearly two years now, the principles and practice of Education and Relaxation in Pregnancy and Labour (or Natural Childbirth) has been taught in the Croxley Green Ante-Natal Clinic in accordance with the original teachings of Dr. Grantley Dick Read.

During 1950, 24 of the cases were instructed ante-natally and delivered by Natural Childbirth. Post-natally these mothers were given a short questionnaire to fill in, in which they could record their findings and opinions. The questions were as follows :—

(1) Did you find the practice of relaxation during pregnancy difficult or irksome ?

(2) Did the teaching at and your visits to the Clinic give you confidence and understanding ?

(3) In the 1st Stage of Labour were you able to relax during contractions ?

(4) Did you like the peacefulness of your labour ?

(5) Would you prefer to have been unconscious when baby came ?

(6) Do you look back on the birth as a pleasing experience ?

(7) Does this labour compare favourably with your previous ones or not ? (For multipa only).

Table of Answers.

Question.	*Yes.*	*No.*	*Uncertain.*	
1	3	18	3	
2	24	—	—	
3	21	1	1	
4	24	—	—	
5	—	24	—	
6	21	—	3	
7	15	1	—	(16 multiparous patients)

Personal comments by the Mothers themselves were asked for at the end of the questionnaire ; here are some typical examples :—

1. *Para 0—aged 25—7 lb. M.* " Having a baby is nothing to fear, and not half as bad as one imagines it will be."

2. *Para 1—aged 26—7½ lb. F.* " After having my second child with relaxation I highly recommend it to every expectant mother."

3. *Para 0—aged 23—8 lb. F.* " I was greatly surprised at the lack of pain although during pregnancy I had tried to convince myself there was going to be none. I only had half hour of strong contractions, but even these were quite bearable, and didn't worry me at all. I wouldn't mind having baby again to-morrow."

4. *Para 3—aged 38—5 lb. M.* " I never had such an easy labour, and would heartily and sincerely recommend learning the art of relaxation to every expectant mother."

5. *Para 3—aged 36—9 lb. M.* " Relaxation definitely shortens labour and is very beneficial during pregnancy both physically and mentally."

6. *Para 1—aged 26—7 lb. F.* " I found that relaxation removed all tension especially during the first stage, and eliminated all pain. Thus it left me fresh to help during the second stage—this I found of the greatest help."

It is my firm opinion, and the midwives who have delivered the cases concur, that education of the mothers for Labour and instruction in the Art of Relaxation throughout pregnancy can and does produce a normal and natural childbirth which is painless in varying degree. The benefit derived from the instruction is directly proportional to the degree of active co-operation of the mother.

I should like to thank the midwives of Croxley Green for their 100 per cent co-operation with me in this work which indeed made it possible at all. The confidence that both I and the Patients have in them is the " foundation-stone " of the work.

Ambulance Births.

A new difficulty is the number of births on route to hospitals and in the two years under consideration the ambulance service dealt with thirteen patients who were delivered in ambulances and twenty-four who were in labour at home when the ambulance called to take them to hospital. The reasons for these deliveries are being studied and it was felt wise to face up to the situation by giving the Ambulance Drivers some instruction in elementary midwifery. The County Nursing Officer investigated each of these ambulance births and reports as follows :—

The number of expectant mothers transported from their own homes to hospital has greatly increased since the hospital service became free to all expectant mothers and this, therefore, increases the number of births that is likely to occur in transit. Also the time of the journey between home and hospital may take longer than in the past, as it is not always possible to reserve a bed for an expectant mother in a local hospital for the date required. Furthermore, expectant mothers require explicit instructions on when to call an ambulance, and these instructions may vary with each hospital. An endeavour is being made to ensure that adequate ante-natal advice is given and that the mother will be accepted into hospital in good time for her confinement to take place with a minimum of anxiety.

Lectures on emergency midwifery action, accompanied by the showing of a suitable film, have been given at various centres and full written instructions given to each ambulance driver, in addition to suitable sterile packs. Each ambulance driver is supplied with a list of midwives' addresses and telephone numbers, and the ambulance teams endeavour to obtain the services of a midwife without undue delay. Following a birth in an ambulance a report is sent to the Health Department. The Deliveries which have occurred have been very adequately dealt with and the ambulance men are to be commended on action taken. There is no reason to consider the appointment of a qualified midwife to be in attendance, as this would mean :—

(1) unnecessary expense ;

(2) increasing the shortage of midwifery labour in hospitals and in the domiciliary field.

A summary of the confinements which have occurred in an ambulance, or in the house prior to the arrival of the ambulance is given below :—

	Births in Ambulance			Births at Home		
Station.	*1949*	*1950*	*1951*	*1949*	*1950*	*1951*
Hertford	3	1	—	2	—	—
Hoddesdon	2	—	—	—	—	—
St. Albans	2	1	1	5	2	2
Watford	1	—	2	1	—	6
East Barnet	1	—	3	2	—	—
Hemel Hempstead	1	—	1	—	—	—
Rickmansworth	1	—	—	—	—	—
Letchworth	—	1	—	2	—	2
Barnet	—	1	—	—	—	2
Hitchin	—	1	1	—	2	1
Cheshunt	—	—	—	—	—	2
Welwyn Garden City	—	—	—	1	1	1
Bishop's Stortford	—	—	—	1	1	1
Stevenage	—	—	—	—	1	—
Total	11	5	8	14	7	17

SECTION 24—HEALTH VISITING.

Report of the County Nursing Officer.

Although the actual number of health visitors employed at the 31st December, 1951, was less than at the end of 1950, more staff is required to provide a satisfactory service for the growing new towns, in addition to increasing population elsewhere. The tendency has been to separate the services in the urban areas from combined duties, so that the Health Visitor would be available to carry on with her work without disturbance from nursing or midwifery duties.

The new towns have not presented very great difficulty, due to the fact that accommodation is sometimes available for Health Visitors and there is also work of special interest in respect of the numerious problems arising in the families who are placed there. The Health Visitors' duties in the new town are always heavy, as residents do not know each other and do not direct the Health Visitor or provide the useful gossip which often gives a clue to family background unobtainable by any other means.

There is a dearth of Health Visitors throughout the country, which has probably been further increased due to the lengthening of the Health Visitors' training, and it has been impossible to fill vacancies as they arise within the County.

In 1950 and 1951, under County Scholarship schemes, 10 and 4 Health Visitors respectively completed training, 4 and 3 completed the combined course of training as a Health Visitor and Queen's Nurse, and these students have been valuable in filling posts where their services were most urgently required.

The County continues to accept trainees from the London training colleges and also interested visitors from abroad to see how public health duties are carried out in urban and rural areas, and very often the trainees return to this County as full-time employees when their period of training has been completed.

A perusal of the statistics on the work of the health visiting staff will not show any great increase, but more and more is the Health Visitor being called upon to co-operate in obtaining vital information for surveys. At the present time the Medical Research Council is carrying out its Anti-Tuberculosis Clinical Trials, and the Health Visitors are playing a large part in helping the research team with the collating of information and the following up of cases.

TABLE 20.

WORK CARRIED OUT BY HEALTH VISITORS DURING 1949, 1950, AND 1951.

No. of New Homes Visited			No. of Babies under Supervision, 31st December			Health Visits to Mothers and Babies			No. of Children aged 1–5 years under Supervision, 31st December			Visits to Children 1–5 years			Health Visitors' Attendances at Welfare Centres		
1949	1950	1951	1949	1950	1951	1949	1950	1951	1949	1950	1951	1949	1950	1951	1949	1950	1951
12,192	11,639	11,208	9,890	9,705	9,336	67,048	68,981	67,838	35,367	36,291	36,834	79,151	81,306	77,036	8,612	7,938	9,235

CHILD LIFE PROTECTION.

(on behalf of Children's Committee.)

	No. of Foster Children Visited.	*No. of Visits Paid.*
1949 .	235	1,084
1950 .	144	684
1951 .	138	907

ADOPTION OF CHILDREN.

(on behalf of Children's Committee.)

No. of Children Visited.	*No. of Visits Paid.*
189	874
210	928
241	999

See page for details of Tuberculosis visiting by Health Visitors.

The Health Visitors at High Barnet, Berkhamsted, and Ware are all running Mothers' Clubs, although the method differs in each place. In addition, there is an ante-natal Stork Club at Watford, and these clubs are proving a very good source of supplying educational information to the mothers in a palatable way.

The advantage of holding clubs, apart from Infant Welfare clinics, enables the mothers to be more relaxed, for the toddlers are looked after in an adjoining room by a rota of the mothers, and the members get together, gossip and exchange views on housewifery, rationing, and other useful points. The Health Visitor at Barnet has wisely encouraged a mothers' committee to be formed so that the business side is carried on by themselves, with the Health Visitor remaining in the background to guide and help if required.

The Club at Barnet is held each fortnight and very interesting speakers and demonstrations have been available, and the Club at Ware is having a meeting fortnightly during the evening period, to which fathers are invited. The Barnet Health Visitor has stated that at Barnet the mothers prefer not to have a combined Fathers' Club in the evening, as it might be difficult for them both to attend because of interfering with the children's bedtime.

The Berkhamsted Club is run on somewhat different lines, and the balance is on the social side with less educational arrangements. It has been proved that the numerous experts available within each district are very happy to speak to the mothers on their own work and duties, and I understand that the Sanitary Inspector, in many instances, has given talks on different points and been very surprised at the type of questions which have arisen. Social outings are also arranged by the Clubs—a theatre in the winter months and a picnic during the summer—for which the members contribute throughout the whole year.

It is hoped that these Clubs will gradually spread throughout the County as being an adjunct to existing clinic conditions where it is more difficult to instil propaganda.

SECTION 25—HOME NURSING SERVICE.

Report of the County Nursing Officer.

The home nursing continues to change from the nursing of a few years ago, due to the amount of chemotherapy treatment that is helping to prevent crippling and disabling diseases. Futhermore, the nurses state that the use of " Darby and Joan ", " Evergreen " and Old Persons' Clubs of various kinds, is keeping the older people more active and interested, and that there is a tendency for a decrease in the number of elderly people requiring general nursing care.

The number of visits per patient is probably increased for injection treatment, but the length of time spent with each case is decreased as compared with the past. Domiciliary nursing may tend to become less interesting and, in this field as well as that of domiciliary midwifery, there may be little encouragement to the younger nurse with many years of training and qualifications to undertake work of this kind unless she has family commitments which will compel her to have a home for dependant relatives.

The training of Queen's candidates continues at Watford key training home. Fourteen completed training in the two years under review and seven more commenced training during 1951, but owing to shortage of staff for the area served by the Watford Home, it has not always been possible to use the Hertfordshire candidate, when trained, to replace shortages elsewhere within the County.

The work at Watford is now expanding due to the vast increase of population all round the town—and the new housing estates have enlarged the travelling area.

The problem of the housing of staff is a most difficult one to solve for it has been found that (i) some nurses require furnished accommodation, (ii) some prefer to furnish their own. The cost of supplying furniture is high and it would appear that a few fixed goods should be placed in each house and the nurses or midwives allowed to hire what they need from a central store. This would solve the problem of each type and would make for easier administration and cheaper cost of supply.

Staff housing in new towns has been reasonable, and houses have been made available at :—

53 Longlands, Adeyfield, Hemel Hempstead.
8 Sawyers Way, Hemel Hempstead.
103 Muirfield Road, Oxhey Estate.

In addition, new houses have been provided by District Councils at :—

Benington (transfer).
Great Amwell.
Essendon.

Relief work has been covered mainly by the employment of local married nurses who are willing to relieve on a stated fixed day each week and for stated holiday periods.

Student Queen's Nurses are still being placed with Hertfordshire nurses by Queen's Training Homes for a few days' experience of nursing in rural areas. Ashwell, Berkhamstead, Boreham Wood, Kings Walden, Royston, and Wheathampstead nurses are accommodating the students. 52 have visited the County in the two years.

Home Nursing by District Nurses, 1950 and 1951.

	Cases Attended.		*Visits Paid.*	
	1950.	*1951.*	*1950.*	*1951.*
Medical, Surgical, and General .	14,437	14,939	317,169	314,498
Tuberculosis	298	272	10,887	9,579

SECTION 26—VACCINATION AND IMMUNIZATION.

Table 21.

Vaccinations.

Year	Primary		Revaccinations	Total during year	No. of live births during year	Percentage vaccinated under one year of age
	Under one year of age	Over one year				
1944	3,175	3,881	2,415	9,471	10,104	31·4
1945	2,439	260	112	2,811	8,764	27·8
1946	3,453	393	366	4,212	10,522	32·8
1947	3,405	384	427	4,216	11,065	30·8
1948	2,400	324	563	3,287	9,756	24·6
1949	2,562	560	966	4,088	9,236	27·7
1950	3,434	1,128	1,737	6,299	9,085	37·8
1951	3,924	1,804	3,004	8,732	9,225	42·5

Diphtheria Immunization.

Year.	*Number of Children who completed a Full Course of Primary Immunization.*		*Number given a Reinforcing Injection.*
	Under 5 years of age.	*Over 5 years of age.*	
1948	7,466	1,136	5,664
1949	7,047	1,449	5,946
1950	6,319	1,037	6,610
1951	7,527	1,015	8,102

The diphtheria deaths during the past ten years have been as follows :—

Year.	*Males.*	*Females.*	*Total.*
1942	2	3	5
1943	2	4	6
1944	3	5	8
1945	1	—	1
1946	—	1	1
1947	1	1	2
1948	—	1	1
1949	—	—	—
1950	—	—	—
1951	—	—	—

It is hoped that the fact that we had no cases of diphtheria notified in the County during 1950 and only 4 in 1951 and no deaths for 3 years, will not lead members of the public to imagine that we can afford to forget about this disease. Indeed, the reverse is true. Diphtheria has been eliminated by the artificial immunization of our child population and is now rare in the community. This means that we are no longer naturally immunized by contact with cases from whom we receive continual small doses of infection sufficient to stimulate our protective mechanism, but only in the minority sufficient to provoke an attack of the disease. With this new state of affairs the need for artificial immunization to be carried out with absolute thoroughness becomes greater than ever. It may soon become necessary to consider whether we ought not to extend the practice of giving reinforcing doses of diphtheria prophylactic to the older age groups. In the past it could be assumed that the young adolescent and the adult had a natural protection against diphtheria, or had already suffered from the disease. This will not be true in the future.

SECTION 27—AMBULANCE SERVICE.

Report of the County Ambulance Officer.

Demands on the Ambulance Service continue to increase and the table given below shows this upward trend that has proceeded since July 1948 when the free service under the National Health Act began.

	1948. No. of Cases.	*1949. No. of Cases.*	*1950. No. of Cases.*	*1951. No. of Cases.*	*Increase 1951 over 1950.*
January	—	5,100	7,910	10,209	2,299
February	—	5,521	8,461	10,835	2,374
March	—	6,264	9,030	12,446	3,416
April	—	6,695	8,962	10,788	1,826
May	—	6,513	9,583	10,732	1,149
June	—	6,007	9,186	14,018	4,832
July	2,592	7,288	11,092	11,160	68
August	3,162	6,214	7,359	8,983	1,624
September	4,048	6,984	10,978	13,116	2,138
October	4,523	8,107	10,166	11,710	1,544
November	4,420	7,300	9,994	12,665	2,671
December	5,283	7,697	11,434	13,716	2,282

The increase in the number of patients continues to be entirely due to conveyance of hospital removals as the number of accidents, cases of sudden illness and maternity continues to remain consistent, as the following table shows :—

	1948. (Six months.)	*1949.*	*1950.*	*1951.*
Accidents	1,273	3,177	3,560	3,960
Sudden illness	1,398	3,298	2,971	2,584
Maternity	1,639	3,650	3,547	3,691
	4,310	10,125	10,078	10,235

DETAILS OF CASES DEALT WITH DURING 1950.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Total Mileage
Accidents . . .	240	219	237	353	233	318	373	327	402	275	313	370	3,560	—
Sudden illness . .	287	280	234	286	197	236	258	201	261	255	219	257	2,971	—
Removals (Maternity) .	288	283	316	349	301	285	338	257	326	261	242	301	3,547	—
Removals . . .	4,797	5,447	5,510	5,995	6,310	6,261	8,151	4,804	8,093	7,420	7,152	8,910	78,910	—
Totals . . .	5,612	6,229	6,297	6,883	7,041	7,100	9,120	5,589	9,082	8,211	7,926	9,898	88,988	942,594
Hospital Car Service . .	2,263	2,148	2,676	1,990	2,517	1.989	1,889	1,762	1,788	1,930	1,977	1,457	24,386	670,887
Isolation Hospital . .	35	84	57	89	25	97	83	8	108	25	91	79	781	6,867
	7,910	8,461	9,030	8,962	9,583	9,186	11,092	7,359	10,978	10,166	9,994	11,434	114,155	1,620,348

DETAILS OF CASES DEALT WITH DURING 1951.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Total Mileage
Accidents . . .	229	225	352	269	301	442	349	310	441	367	311	364	3,960	—
Sudden illness . .	223	207	294	208	174	250	174	199	252	177	184	242	2,584	—
Removals (Maternity) .	264	284	401	308	351	378	289	267	342	273	221	313	3,691	—
Removals . . .	7,744	8,315	9,495	8,145	7,987	10,983	8,400	6,515	10,384	8,918	9,797	11,016	107,699	—
Totals . . .	8,460	9,031	10,542	8,930	8,813	12,053	9,212	7,291	11,419	9,735	10,513	11,935	117,934	1,132,310
Hospital Car Service . .	1,680	1,742	1,770	1,815	1,837	1,946	1,845	1,662	1,610	1,900	2,064	1,697	21,568	586,100
Isolation Hospital . .	69	62	134	43	82	19	103	30	87	75	88	84	876	6,578
	10,209	10,835	12,446	10,788	10,732	14,018	11,160	8,983	13,116	11,710	12,665	13,716	140,378	1,724,988

During 1950 the number of patients carried by the directly provided service showed an increase of 86½ per cent over the previous year, with a corresponding increase in mileage of 45 per cent. In 1951 there is an increase of 45 per cent in the number of hospital patients carried, with a corresponding increase in mileage of 21 per cent. During the latter months of 1951 radio control was instituted resulting in a saving in mileage during the last few weeks of the year of about 300 miles per week. This saving is showing an upward trend and should make a considerable difference next year.

SECTION 28—PREVENTION OF ILLNESS—CARE AND AFTER CARE.

In the report for 1949, a general outline was given of the services provided under this section of the Act, and of the wide scope of the demands being made upon them. The last two years has made it even more evident that the size of the field of possible work can be almost infinite. Practically every household affected by illness has some problem to face. During 1950 and 1951, due partly to the increase in population in the County and partly to greater knowledge of the facilities available, requests for help increased considerably.

The increase in work meant an increase of staff, and during 1950 a fifth tuberculosis Health Visitor was appointed, and in 1951 two Almoners (one part-time only) and another tuberculosis Health Visitor. A greater number of field workers does usually mean some increase in office staff and consideration must be given soon to the clerical requirements of the Social Workers.

It will be seen later on in the reports of the individual Almoners that many of the needs of the households with illness among its members have to do with financial difficulties. The short acute illness or the straightforward operation may only necessitate a period of holiday home convalescence to enable the patient to return to normal life. The more chronic affliction, with the wage-earner or the housewife unable to work for weeks or even months, places a very considerable strain on the household, and the Almoner then may have to spend much time and exercise no little ingenuity to obtain help to smooth out their initial difficulties and allow adjustment of the family life.

No one person can deal with the troubles of every family, and it is only by the closest co-operation between the members of the social welfare team and between the Voluntary and Statutory authorities that the best results can be achieved. This co-operation has been manifest during the past two years, and the degree of success resulting is, it is hoped, an earnest of continued achievement in the future.

The Almoners' duties at the end of 1951 were as follows and their reports can best be considered under similar headings :—

Division.	*General.*	*Tuberculosis.*	*Mental Health.*	*Unmarried Mothers.*	*V.D.*
South-West .			Miss Howard Jones Miss Ballance		
Dacorum .			Miss Bone		
St. Albans .	Miss Bone	Miss Bone	Miss Morfey	Miss Morfey	Miss Bone
North . .	Miss Horton	Miss Horton	Miss Morfey	Miss Morfey	Miss Morfey
East . .	Miss Horton	Miss Horton			
Waltham Cross		Miss Morfey	Miss Morfey	Miss Morfey	Miss Morfey
South . .			Miss Waghorn		
Welwyn . .	Miss Horton	Miss Horton	Miss Morfey	Miss Morfey	Miss Morfey

General After Care Almoners' Reports.

South-West Herts Division.

It is to be regretted that there has been so little opportunity to develop this section of the Almoners' duties.

This aspect, which appeared to show signs of useful development, has unfortunately had to take second place during the second half of 1950 and in 1951 as a result of the demands of one particular section of her work.

In 1949 it was hoped that in due course the General Practitioners might be circularized regarding the services which the County Almoners would undertake on behalf of their patients. This action has never been possible. A plan of co-operation with the local hospital Almoners was, however, worked out initially and cases were referred by them, but again this plan has had to be drastically curtailed.

During 1951, 53 patients have been referred from various sources including 27 from General Practitioners. It should be noted that a few doctors have consistently referred cases to the County Almoners. Whether this fact can be regarded as being indicative of the need for further liaison with all General Practitioners in the area remains to be seen, since there has been so little opportunity to prove or disprove it. Nevertheless, the Almoners would like to have further opportunity to explore what can be regarded as a useful field of work.

Though most of the cases referred from this source are patients in need of holiday home convalescence, a few cases of patients needing rather more detailed case work have been referred. Two such examples are quoted :—

(1) A married woman was referred to the Almoner by her doctor on account of idiopathic epilepsy, with the request that her admission to a Colony should be explored. This case has necessitated reports to a London hospital, where the patient was found to attend periodically, and where little was known of her difficulties and those of her family. Frequent interviews were made by the Almoner with the patient and her husband in order to assess these difficulties and needs, and to satisfy herself that both patient and relatives fully understood the kind of treatment which a Colony provides. As a result of the County Almoner's reports the Physician at the hospital in London agreed to recommend the patient to a Colony particularly suited to her, and as a result the patient was given very high priority on a long waiting list.

(2) A youth aged 17 years was referred to the Almoner for help with some form of occupational therapy. The Almoner subsequently found that this boy was a spina-bifida case, able only to move about the home to a limited degree. He had full use of his arms and was of good intelligence ; his education had been in the form of home tuition. It became clear that the lad needed something more than an " interest " and if possible should be helped to become self-supporting. Weaving with a loom adapted to his degree of disability was suggested by his parents, and this seemed a constructive plan, since his father hoped to have access to a market for the finished goods. The Almoner realized that this family had not had the benefit of any facilities normally available, and since they had been under considerable expense in their endeavours to educate the boy, had reached a point where further expense was proving a real burden.

The case was therefore referred to the Youth Employment Officer to explore the possibilities of registration under the Disabled Persons' Training Scheme and of a grant towards the particular training required. The Almoner understands that shortly this boy may be enabled to make some kind of livelihood for himself.

North and East Herts, and Welwyn.

During 1951, fourteen cases were referred, of which four were for convalescence, four for Nursing-Home accommodation or Homes for the Aged, and three for purely financial problems. One case needed help with suitable cooking arrangements in his cottage ; one case was referred for general supervision and any help possible after the patient's discharge from hospital ; another case was referred for help with ambulance transport to go for a much-needed holiday.

Of these, seven were referred by their own Doctors, five by Almoners or Social Workers, one by an Officer working for the Herts County Council, and one by her husband.

Four were referred for convalescence, four were needing nursing care, and four were needing financial assistance while two of the cases still remain current.

I would say that although the number of General After-Care cases in 1951 is small, the types of cases referred have been on the whole more satisfactory, in that it was possible to give some help in most cases, whereas in previous years the proportion of cases which seemed unable to be helped by anyone was larger.

Forty-one cases were registered for " *General After-Care* " of whom fifteen were young married women in lodgings or hostels needing help in regard to post-natal accommodation and rehousing, and seven others seeking advice and help on general problems connected with the arrival of a new baby. Three others were cases where convalescence met an immediate need and the remainder required general help and advice.

Tuberculosis.

In spite of the schism of the Tuberculosis Service as the result of the operation of the Health Act, every endeavour has been made to prevent any holes in the fabric of the service essential for the well-being of the tuberculous person and his family. Regular meetings are held with the Chest Physicians, and the County Council Almoners and Tuberculosis Health Visitors work as part of the Clinic team.

I have mentioned earlier in this report the loss sustained by the death of Dr. Ford early in 1951. Dr. N. A. Neville was appointed by the North-East Metropolitan Hospital Board in his place, taking up his duties as Chest Consultant Physician for the Hertford and Bishop's Stortford areas in August.

In 1950, the staffing of the North Herts Chest Clinics was taken over by the staff at the Luton Clinics, and Dr. Brian Shaw was appointed as the Chest Physician at Hitchin.

The Chest Physicians in the County have been asked again to give their comments on the work of the service.

Dr. P. W. Roe, Dacorum and South-West Herts divisions.

The year 1951 is the first complete year during which a team of all necessary types of health workers, assisted by the X-ray department at Shrodells Hospital, have been available to combat Tuberculosis in West Herts. In spite of this, however, it has not been a year of outstanding advances, as might have been expected, partly because of the totally inadequate premises available, and partly because the mounting size of the problem means that the work to be done is always increasing more rapidly than the increase in staff designed to meet it. The appointments system introduced at the end of 1950 proved a great success and was very popular with the patients. However, the X-ray arrangements remained unsatisfactory because no X-ray plant was available for use of the Chest Clinic in Watford. The old system of booking an X-ray for another day was still retained. During the year there was a general

shortage of X-ray films which interfered with the work of the Chest Clinic, although at no time did the Chest Clinic have to close down. On 1st January, 1951, a new comprehensive contact follow-up scheme was introduced for the first time in West Herts. 816 new contacts and 1,019 follow-up contacts were examined, making a total of 1,835 examinations. The new L.C.C. housing estate at Oxhey also continued to grow during the year and about 150 cases were transferred into the area, bringing the total number of transferred cases up to about 500.

The combating of tuberculosis in the Watford area requires special measures not likely to be necessary elsewhere in the County. This arises from the fact that Watford is an industrial area of some size having a long history. It therefore has social problems akin to other long standing industrial urban areas, such as are to be found in certain parts of London and Middlesex, but not elsewhere in Hertfordshire. In the field of tuberculosis the Watford area has a very serious problem to tackle which requires the application of measures which have already proved their success elsewhere. To this problem there has been recently added the special problem of the Oxhey Estate. There is a tendency to get these two problems confused, but they are in reality two separate problems.

The Welfare department of the organization has during the year been greatly concerned with the problems of Oxhey patients. The problems of these patients are so largely bound up with economic factors that the Almoners have many extra duties to carry out for these patients. The appointment of an additional part-time Almoner during the year has been a great assistance with this work, but the inadequacy of the clerical help provided is increasingly making itself felt, as more work is being done and more patients are being placed on the Chest Clinic Register. There is no doubt that the time has come when a complete reorganization of the Chest Clinic Welfare Service in South-West Herts is vitally necessary.

One outstanding failure during the year is the collapse of the home help service as far as tuberculous patients are concerned. This has arisen from the decision of the County Council to recover costs on this service by a method which is totally inapplicable to tuberculous patients. The Appeals System which was later introduced has brought some relief but the method is cumbersome and also somewhat insulting to the dignity which the average patient very properly possesses. The Appeals System has been of assistance in a number of the more serious cases who would otherwise have been denied the use of this necessary service, but it has frequently happened that the patient can only be prevailed upon to appeal after considerable pressure has been applied by the Chest Physician and the Almoner. The Chest Physician resents the fact that in order to benefit the health of his patient, he is expected to urge his patient, much against the patient's wishes in most cases, to adopt the attitude of the professional scrounger, to ask for a special exception to be made in her case, and to think up all the special reasons why a home help should be provided at a cheaper rate. The machinery for assessing home help payments should be greatly simplified and should eliminate the undesirable psychological features in the present arrangements.

The introduction of an adequate appointments system has greatly facilitated the follow-up work of the tuberculosis visitors. The control of the tuberculous population and their contacts largely depends upon this system. To complete the work satisfactorily adequate numbers of tuberculosis visitors are required. Three tuberculosis visitors were available in West Herts during 1951 and the appointment of a fourth was agreed towards the end of the year. Case finding is largely dependent upon the work of the tuberculosis visitors and the general practitioners. Close liaison between the Chest Clinic team and the general practitioners is maintained by using every opportunity to keep in touch with them, and assisting them in every way possible. Adequate clerical help at the Chest Clinic is essential to do this work.

Looking to the future the main contribution which the County Council has to make towards the tuberculosis service in West Herts is to provide adequate staff to enable the work to go on smoothly and successfully. On a population basis four tuberculosis visitors should be sufficient, but in the Oxhey Estate there are 500 patients who have been moved into the area as additional patients. The need therefore is correspondingly greater, and a total of five tuberculosis visitors will eventually be required—one for Dacorum and four for South-West Herts. As far as the Welfare Department is concerned the position in the Dacorum area is satisfactory for the time being, but in South-West Herts reorganization is necessary. It is desirable that one Almoner should work full-time at the Chest Clinic and that an Almoner's Clerk should be appointed full-time to the Watford Chest Clinic to be on the payroll of the County Council. The Almoner should also have some part-time assistance from a second Almoner, so long as the Oxhey Estate is still in the process of development. It is to be hoped that these changes can be satisfactorily made during 1952 as problems of this sort do not get easier if long deliberations intervene.

I should like to end my report by stressing that the Chest Clinic is a unity which belongs neither to the Regional Board nor to the County Council but is shared by both. Both have their duties and responsibilities to fulfil and both have the privilege of sharing in the joys of successful work carried out in the prevention and treatment of tuberculosis. The Chest Physician has the special responsibility of creating harmony where there might otherwise be division and of unifying the policies of both Regional Board and County Council, so that the best possible scheme is made available. If this principle is kept firmly in mind, there is no doubt that success will be achieved.

Dr. J. Brian Shaw, North Herts.

This clinic is still working under great difficulites because of over crowding. There is a great shortage of beds and still no hospital beds have been allotted by the Regional Board for this area.

A considerable amount of domiciliary treatment of tuberculous patients has been undertaken, the bed-ridden patients being brought to the clinic by ambulance for X-ray examination. Minor collapse procedures have been carried out on an Out-Patient basis. The help given by the District Nurses in chemotherapeutic measures at home has been of great value. Keen and efficient Health Visitors have greatly helped in this work.

B.C.G. Vaccination was given to 27 people.

Dr. A. G. Hounslow, South Herts Division.

The Clinic started to expand rapidly in 1950 and this expansion continued in 1951. There were 8,050 attendances in 1951 compared with 3,955 in 1949 and 5,735 in 1950. This increase is attributable partly to larger numbers of pneumothorax and pneumoperitoneum refills, but also to an increase in the numbers of patients referred by the general practitioners (670 in 1949, 921 in 1951).

Notwithstanding this increased volume of work, the deaths and new notifications declined slightly in common with many other clinic areas throughout the country. Associated with this favourable trend has been a gratifying reduction in the waiting period for hospital and sanatorium beds. Newly diagnosed patients can usually be admitted to hospital within a matter of days, thus considerably reducing the public health risk. It has meant, too, that infectious patients have been admitted to hospital while their contacts received B.C.G. vaccination, thus eliminating much of the demand for boarding-out for this purpose.

Sixty persons were vaccinated with B.C.G. during 1950 and 63 in 1951 under Section 28 of the National Health Service Act. No untoward reactions to the vaccine have so far been observed, and no tuberculous lesions have so far

occurred in any of the vaccinated. Generally speaking, contacts have been very ready to accept vaccination when offered. The occurrence of pleural effusions in two middle-aged wives of patients suggests that tuberculin testing and B.C.G. vaccination must be borne in mind at all age groups and not only in childhood and adolescence.

276 contacts were examined in 1950 of whom 9 were diagnosed as tuberculous. In 1951, 200 contacts were examined and 11 diagnosed as tuberculous.

The services provided by the County Council were much appreciated. In particular the District Nurses (Streptomycin injections), the boarding-out of child contacts, and the work of the Health Visitor and Almoner might be mentioned. The Home Help Scheme proved less satisfactory, largely owing to financial considerations, and in many cases patients refused to consider a Home Help on monetary grounds. The rehousing of tuberculous patients continued to be a pressing problem, although the Housing Officers and Medical Officers of Health were usually extremely helpful.

Table 22.

Notifications of Pulmonary and Non-Pulmonary Tuberculosis.

	1949				1950				1951			
	No. of cases notified			Attack rate per 1,000	No. of cases notified			Attack rate per 1,000	No. of cases notified			Attack rate per 1,000
	M	F	Total		M	F	Total		M	F	Total	
Pulmonary.												
Urban . .	200	126	326	0·73	189	137	326	0·75	226	133	359	0·83
Rural . .	60	50	110	0·65	64	40	104	0·61	77	65	142	0·79
County . .	260	176	436	0·73	253	177	430	0·71	303	198	501	0·82
Non-Pulmonary.												
Urban . .	34	28	62	0·14	28	32	60	0·13	15	14	29	0·07
Rural . .	15	17	32	0·19	13	19	32	0·18	11	15	26	0·15
County . .	49	45	94	0·15	41	51	92	0·15	26	29	55	0·09
Pulmonary and Non-Pulmonary.												
Urban . .	234	154	388	0·9	217	169	386	0·88	241	147	388	0·9
Rural . .	75	67	142	0·85	77	59	136	0·8	88	80	168	0·94
County . .	309	221	530	0·88	294	228	522	0·86	329	227	556	0·91

Table 23.

Death-Rate from Pulmonary Tuberculosis.

(Per 1,000 Population.)

	Hertfordshire						England and Wales
	Urban		Rural		County		
	Number	Rate	Number	Rate	Number	Rate	Rate
1935–44 (average for ten years).	155	0·41	50	0·35	205	0·39	0·5
1945 . .	141	0·36	33	0·23	174	0·33	0·6
1946 . . .	134	0·33	33	0·23	167	0·30	0·5
1947 . . .	164	0·39	56	0·37	220	0·38	0.5
1948 . . .	146	0·34	35	0·22	181	0·31	0·5
1949 . . .	107	0·25	33	0·20	140	0·23	0·4
1950 . . .	95	0·29	24	0·14	119	0·20	0·3
1951 . . .	71	0·16	34	0·19	105	0·17	0·3

Table 24.

Death-Rate from Non-Pulmonary Tuberculosis.

(Per 1,000 Population.)

	Hertfordshire						England and Wales
	Urban		Rural		County		
	Number	Rate	Number	Rate	Number	Rate	Rate
1945 . . .	20	0·05	7	0·05	27	0·05	0·10
1946 . . .	26	0·06	12	0·08	38	0·07	0·08
1947 . . .	19	0·04	6	0·04	25	0·04	0·08
1948 . . .	17	0·04	9	0·06	26	0·04	0·07
1949 . . .	21	0·05	7	0·04	28	0·05	0·05
1950 . . .	14	0·03	6	0·04	20	0·03	0·04
1951 . . .	6	0·01	9	0·04	15	0·02	0·04

Tuberculosis After Care.

The following figures show the Nurses' activities in 1949, 1950, and 1951 :—

	1949.		*1950.*		*1951.*	
	Attendances at Chest Clinics.	*Visits to Patients.*	*Attendances at Chest Clinics.*	*Visits to Patients.*	*Attendances at Chest Clinics.*	*Visits to Patients.*
Tuberculosis Health Visitors.	751	3,061	1,268	5,136	1,585	8,652
Health Visitors .	215	688	94	421	35	281
District Nurses .	—	6,460	—	10,887	—	9,579

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Financial problems continue to be the most worrying to the majority of tuberculosis patients. These problems, however, are on the whole more easily and satisfactorily dealt with than in previous years. The National Assistance Board's tuberculosis scales were raised again in September, 1951, the Ministry of Pensions increased their supplementary allowances, and the Ministry of National Insurance increased the rates of Health Insurance benefit. Practically every patient, therefore, is eligible for help from the National Assistance Board, the Ministry of National Insurance, or the Ministry of Pensions, or all three, but it is noticeable that pensioners are considerably better off than those on National Assistance Board allowances, in addition to which they have the benefit of extra help from the Red Cross in the form of bedding, clothing, food parcels, etc. A patient on National Assistance needing bedding, clothing, or extra nourishment may or may not be given an extra needs grant—whereas a pensioner needing these things is almost invariably helped by the Red Cross.

The main difficulty with regard to the money worries of tuberculosis patients is that of adapting themselves to a lower income-level, and therefore a lower standard of living than normal wages would permit.

Housing is still a problem, though gradually tuberculosis cases are being given accommodation : Thirteen out of twenty-eight cases specially referred to the Housing Authority were rehoused or found their own accommodation in 1951.

The solving of a housing problem frequently presents the problem of providing furniture, particularly as the Housing Authority will often want to make sure a family can, in fact, provide the minimum furniture needs, before allocating a house. When this occurs, and the tuberculosis patient is still on the sick-list, there is little likelihood of there being any savings with which even the barest minimum of furniture can be bought. The voluntary agencies

are usually very sympathetic to this problem, and assistance has been given by the Friends of the Poor, Forces Help Society and Glasspool Trust. The National Assistance Board, too, will in some cases make grants for furnishings and removal expenses.

Rehabilitation is to my mind by far the most difficult problem to be dealt with in connection with tuberculosis patients. To begin with, many have to be told they cannot return to the job they have been used to for perhaps many years ; this may be on account of infection or simply because it is too heavy. Older men do not take kindly to the idea of training, even if they are acceptable to the Ministry of Labour, i.e., quiescent and sputum negative, and able to do at least eight hours work a day.

Twenty-two patients were referred to me during 1951 for rehabilitation ; of these five are still not working, but are fit, and four relapsed while efforts were being made to place them in employment or training courses. A further four found their own jobs and are at work, and seven were placed by the Ministry of Labour ; of these seven, three have embarked upon training courses, two are in factory jobs, and two are of special interest : One is being helped to set up in poultry-keeping and has been assisted both by the Ministry of Labour and Herts Agricultural Executive Committee in connection with the purchase of a site and equipment ; the other, a woman, is now receiving tracing work to do at home from a factory in the County. Both these patients have had many years of illness, are still sputum positive, and are unfit to enter the open labour market : Their earnings still have to be supplemented by National Assistance allowances, etc. One other patient, a young fellow with chronic infectious tuberculosis, who has the additional disability of having lost a leg and wearing an artificial limb, has been resettled at home, working at a small printing-machine which was bought and loaned to the patient by the National Association for the Prevention of Tuberculosis. He is now making a profit of about £1 per week, and it is hoped that in due course he will have enough orders to enable him to make a profit sufficiently large for him to be able to do without his National Assistance Allowance.

During 1951, I would say that the number of patients being treated at home has continued to increase ; the question of domestic help and the care of children has therefore become a matter of increasing importance. Thirty-three patients have had domestic help, and thirteen have been helped to remove their children either to foster-parents or to Homes, or to place them in Nurseries or Nursery-Schools.

East Herts.

In Miss Horton's absence on sick leave, I assumed responsibility in the first three months of 1951 for work in connection with T.B. patients attending the *Chest Clinic in Waltham Abbey*, and for a time visited patients in their homes at the request of the Chest Physician. At that time it was not possible to spare time to attend the Clinic in person but on Miss Horton's return to duty I was able to arrange to attend the Clinic weekly, in addition to home visiting. Help has been arranged in 140 cases, mostly in more or less routine requirements, such as free milk, Home Help, Diversional Therapy, care of children—either as contacts or in the absence of a parent, clothing, and general comforts. One patient with a positive sputum was sent to an appropriate Holiday Home. Arrangements had been made for a man in a chronic condition to have a caravan holiday with his wife and two children, the cost of which was raised from Voluntary Funds, but as the time approached he became less well and the plan had to be abandoned. In order not to disappoint the children, an alternative arrangement was made for them to go to a Holiday Camp under the auspices of the Shaftesbury Society, since they did not qualify for a holiday under any official scheme. This family has for some years perforce been entirely dependent upon National Assistance and National Insurance and

consequently require frequent help with any requirement for which National Assistance does not cater.

Another family who recently moved into this area have been in great difficulties and have required help of various kinds. Shortly after arrival in this County the wife was found to be in an advanced state of pulmonary tuberculosis and was isolated in bed at home ; the eldest daughter gave up work to look after her and a small sister ; two other working members of the family were found to be infected and were admitted to Sanatorium. The loss of three persons' earnings from the family income, in face of increased rent, has made the family's budget a narrow one. Free milk, library books, diversional therapy, a grant from Voluntary Funds to clear a debt, and the negotiation of an allowance from National Assistance for the daughter at home, and help in securing priority for a school place for the small girl have all been means by which their difficulties have been relieved, but as long as the situation continues they will have a struggle to make ends meet.

In the course of the year 114 home visits were paid.

South-West Division.

In 1950, the continual expansion of the Chest Clinic during that year, as a result of increasing numbers of rehoused Tuberculous cases on the Oxhey Estate, required the almoner to spend the greater part of her time on that section of her work.

During 1951, an even greater increase in the number of these patients demanded yet more time and thought owing to the urgency of many of the problems presented by the rehousing of families faced with long term illness and consequent low income. It is for this reason, therefore, that no fresh developments in other sections of her work can be recorded during 1951.

In October, with the appointment of a second Almoner, it was hoped that much leeway could be made up and that more thorough case work and follow-up could be undertaken in the future. It must be emphasised, however, that even with an increase in Almoner strength, it is impossible to build up a really efficient Almoner service in the South-West Division without an adequate basis of clerical help, accommodation, and telephone facilities. During 1951 these facilities have not been fully available.

Liaison with other Agencies, Statutory and Voluntary.

One of the interesting features of work in the South-West Division has always been the strong civic sense in the central area and the integration of social services, both statutory and voluntary. The valuable links with these various bodies have been maintained closely by the County Almoner's Office during 1951, and have frequently been a great source of encouragement and help throughout the year.

Mention must be made specially of the close liaison and constructive help which the National Assistance Board and the British Red Cross Emergency Fund have given, particularly in helping to solve the many difficult problems of tuberculous patients consequent on rehousing.

There has, of course, been continued close co-operation with other sections of the Health Department, particularly with the Health Visitors working in the Division and the Home Help service, also other County Departments, such as the Children's Department and Probation Officers.

During the course of the year the Almoners have been invited to serve in an advisory capacity both on the Committee of the Circle of Help—a local voluntary case committee—and the Oxhey Citizens' Advice Bureau Committee.

Contact with rehoused families in all parts of the Division has frequently emphasized the difficulties which high rents and high cost of living can produce, such as excessive worry on the part of the housewife in her efforts to make ends

meet. This is inevitable, no doubt, when rents are in relation to the size of family rather than to income.

Increase in number of Chest Clinic patients.

By the end of 1951 something like 450 families, (500 cases), had been rehoused at Oxhey on account of the tuberculous condition of one or more members. There has therefore been a continued sharp increase in the number of patients coming under the care of the Chest Clinic and a corresponding increase in the number of Clinic sessions. During the last quarter of the year seven consultation clinics were being held each week, and in addition, three refill clinics and one adult contact clinic.

The number of beds in the local Sanatorium Wards has increased during 1951, and with recent treatment the " turnover " of patients has been speeded up. It is important that the Almoners should continue their contact with these in-patients and often with their families, particularly during the first few weeks following admission and nearer the time of their discharge.

Need for Case Work.

It is not surprising, therefore, that the volume of case work undertaken by the Almoners in this clinic has shown a considerable increase during 1951. It is interesting to note that of the 297 cases registered as needing help of various kinds, 165 were Oxhey patients. During the early part of the year particularly it was these rehoused patients who needed such urgent and detailed help, often on account of their serious medical condition and also because of the complete lack of necessities and essential furnishing. Such cases required immediate liaison with both statutory and voluntary agencies in order to obtain essential requirements and to discourage overlapping and injudicious help. It has been impossible to differentiate between their medical and family needs. By the end of the year the position had shown signs of easing somewhat and there was evidence that the needs of the majority of the Oxhey patients were approximating more nearly to the usual pattern of a T.B. patient's needs during the course of his treatment. Though this does not, however, materially lessen the volume of work, it has lifted the urgency somewhat.

Special problems of Oxhey.

Nevertheless, compared with other areas in the Division, the Oxhey Estate is likely to continue to present problems for some time, possibly affecting able-bodied as well as ill people, owing to the increased cost of living on that estate. This is still an inescapable fact and it shows itself not only in the extra cost of food owing to lack of shopping facilities and high cost of fares, often to London, but even in the extra wear and tear on the children's footwear and clothing because they no longer play " in the street " but go farther afield into the surrounding woods and fields.

T.B. patients and free milk.

The increase in the number of T.B. patients in this Division who have received free milk under the County Scheme may be partly explained by the foregoing reasons, and no application has been put forward without careful consideration of the position in each case.

Home Help needs of T.B. patients.

Thirty-two new cases have been referred for Home Help during 1951, usually because the patient is also the housewife. Cases occur where the patient is on complete or partial Bed Rest and therefore requires the maximum amount of help, or she may have progressed to a stage where she is able to look after her house and children, but in order to keep well, must have a certain amount of help each week with the heavier work. The Home Help Service may be regarded as undertaking particularly constructive work in these latter cases. Without wishing to overstress the needs of Oxhey, a large number of patients

requiring home help are Oxhey patients. The Almoners suggest that this is because the rehoused patients have no relatives nearby who are able to help, as is often the case in other areas ; they are, at the same time, patients whose medical condition requires domestic help of varying degrees. Their husbands often do all they can to help, but as the majority work in London this means an early start in the morning and a late return in the evening.

Effects of high cost on patients.

The Almoners feel bound to say that the charges for the Home Help Service frequently cause considerable anxiety and hardship in these cases of long term need.

The initial recommendation for Home Help is made by the Chest Physician, who indicates how much work his patient is fit to undertake. This recommendation is reviewed from time to time. The Almoner approaches the Organizer, who co-operates most helpfully by arranging the help with as little delay as possible. There is, however, frequently a considerable time lag between the commencement of help and the notification of the charge to be made, the patient is thus often faced not only with a high assessment but with considerable arrears. The resulting anxiety and worry cannot be over estimated, and it is the Almoner who has to soothe the patient and prevent her, if possible, from cancelling the Home Help, since it would be in direct opposition to the medical recommendation.

Home Help Appeals Committee.

The institution of the Appeals Committee within the South-West Division has helped to re-adjust charges to the patients' ability to pay, but this can only take place after much anxiety has already been undergone by the patient. The Almoners in the South-West Division, while they are fully aware of the high cost of this service to the County, suggest :—

(*a*) The basic scale of allowances be brought into line with the recent increases in the cost of living.

(*b*) That a revised basis of assessment, making allowance for such items as wage earner's fares to work, essential hire-purchase commitments, the cost of the patient's extra nourishment needs and other legitimate expenses would not only ease the burden placed on these patients, but would result in more regular payments and perhaps prevent arrears from piling up with little chance of recovery.

Rehabilitation and resettlement of T.B. patients.

During 1951, 27 patients have been referred to the Ministry of Labour Disablement Resettlement Officer, with whom a close liaison exists. In the early part of the year an Industrial Rehabilitation Unit was opened by the Ministry of Labour in Watford. (*N.B.* In March, 1952, this Unit and the Government Training Centre were unfortunately closed by the Ministry of Labour. This is most disappointing since ten–twelve Chest Clinic patients had passed through the I.R.U. between May, 1951, and December, 1951, with most beneficial results.) This centre has proved of great value in the process of resettling a tuberculous patient, since it has not only given vocational guidance where this was needed but has achieved valuable work in generally "toning up" a man or woman who has been unable to work for a long period, thus bridging the gap between a state of leisure and a state of working routine. An added advantage for Watford patients has been that they could easily attend each day. Several patients have been placed in suitable work following their time at the centre, whilst several others have proceeded to a Government Training Centre for training in a specific trade. Suitable employment has been available for patients in the Watford area, though towards the end of the year some difficulty was being experienced in finding work, particularly clerical work.

Red Cross Library for T.B. patients.

In September the Watford Chest Clinic was again fortunate when the British Red Cross and St. Johns, with the aid of a grant from the County Council, opened a library for T.B. patients at 1 St. Albans Road. Though the number of patients interested was not at first great, the Almoners have since been able to put quite a few patients in touch with the library, and either the patients themselves or their relatives can visit the library and choose their books, aided by the sympathetic interest of Mr. Standage, the Librarian. The service is particularly helpful where a patient requires books of a technical nature.

Boarding out of T.B. Contacts.

On the whole, the number of applications for payment of Boarding-out allowances for T.B. contacts has decreased during 1951. This may be due to the fact that the sputum positive patient is admitted to hospital much more quickly than previously.

T.B. patients and rehousing.

Owing to the difficult housing position only sputum positive cases, or cases where the patient is sharing a house and is likely to be a potential source of danger to other occupants are given any real priority, but such cases have fortunately been rehoused very swiftly owing to the liaison between the Chest Clinic, Medical Officer of Health, and appropriate Housing Committee.

St. Albans and Dacorum area.

Reviewing the work done in the past year one is forced more and more to the conclusion that there is very little extreme poverty, except in the isolated case, and one is chiefly concerned in helping a family to adjust itself to a very reduced income on account of long term illness, faced at the same time with increased expenditure on such things as food, milk, etc. The majority of T.B. patients in this area are accustomed to a comparatively high standard of living and find it extremely difficult to budget on T.B. allowances. There seeem to be fewer cases in need of immediate financial assistance when first diagnosed ; in a number of cases, pay from work has continued for a period. It is when this ceases to be available and the income is very seriously reduced, that the financial problem becomes only too apparent.

Help has been obtained from Voluntary Sources for a variety of needs that do not come within the scope of any Statutory Scheme—such as school fees at a Catholic School, where for a number of reasons it seemed best to allow the child to finish the scholastic year, fees for a correspondence course for a home-bound patient, fares for holidays, and in some cases, payments of debts where a patient's anxiety over such a commitment, when quite unable to meet it, is affecting his recovery. Typical of the odd case, which falls within no definite category, but nevertheless had a problem that unaided he seemed unable to solve, is that of a man who had pawned, in another town, his only decent suit of clothes, and having been in hospital for the past three months, had no resources behind him. The Friends of the Poor made a grant—and with the co-operation of the Local Authority Almoner in that town the suit was duly redeemed and returned intact.

The problem of resettlement of T.B. patients continues unsolved in a number of cases. It has been possible to send some young people to Further Education Centres for interim training (or refresher courses) before they are fit to consider full-time work. This has been a particularly helpful arrangement where a patient could perhaps attend the Centre for two whole days a week and have the opportunity of practising shorthand and typing, or attend lectures on general education, and has been a means of bridging the gap between long term enforced inactivity while under treatment, and a return to full employment.

A few men have also been sent to the Watford Rehabilitation Centre (Ministry of Labour) before either getting full time employment or taking a Ministry of Labour training course. Unfortunately this Centre is now closed. The chronic case, unfit to attend any place of employment regularly, even a sheltered workshop, but desperately in need of some form of occupation at home, still presents an insuperable problem for which diversional therapy is an inadequate answer.

1951 is the first complete year spent in the new Chest Clinic at St. Albans, and from the welfare point of view, it has very greatly facilitated the organization of the work. It has been possible to be present at most Clinic sessions and has reduced the amount of essential visiting quite considerably. By seeing newly diagnosed patients at the time of their diagnosis, it has been possible to try and make a diagnosis of their social needs at the same time. In some cases this may be found to be the Almoner's equivalent of N.A.D., but time and suitable accommodation for interviewing are both essential for this, and there is so often very little to show statistically as a result.

Diversional Therapy.

The Diversional Therapy scheme continued to prove very useful to the tuberculosis patients awaiting admission to Sanatorium or, after discharge from the Sanatorium, while building up their strength to return to work.

The South-West Almoners report :—

> " A fair number of patients have been referred for Diversional Therapy on the recommendation of the Chest Physicians and this service, though somewhat restricted, does undoubtedly help patients who wish to have an interest of this kind.
>
> The typewriters on loan have proved very valuable in several cases."

The handicrafts are taught and the materials supplied during home visits to the patients by the British Red Cross Society's Therapist, and we are very indebted to her for her devoted service to those patients.

Mental After-Care.

The number of persons referred for care still continues small, and little action is necessary in the majority of cases.

Almoners' Reports :—

East and Mid Herts.

Ten new cases were referred for *Mental After-Care,* four of them requiring a considerable amount of detailed work and many visits. One girl was eventually found employment, but proved quite unsuitable and caused much trouble by petty thieving, and was subsequently referred back to a psychiatrist.

A married woman suffering from anxiety neurosis was sent away for a holiday and, as she refused to go without her small daughter, arrangements were made for the child to accompany her. She appeared for a time to improve but subsequently deteriorated and she also was referred back for psychiatric treatment. Another young married woman also suffering from anxiety neurosis and travel phobia has been kept under regular supervision. She persistently refused the psychiatrist's advice to accept convalescent arrangements, but as it was felt imperative that she should have a change, arrangements are in hand for her to have a caravan holiday at the seaside with her husband and small boy—the only suggestion she would accept—for which the cost has been raised from Voluntary Funds as the family themselves cannot afford it, and arrangements made through the kind offices of the Rotary Club for the family to be transported without charge by car.

In this type of work a proportion of cases need little more than an occasional friendly visit, but the few who require constant supervision and help tend to remain as " current cases " over prolonged periods, and at the close of the year there were still nine such cases on the books.

South-West Herts.

Only two cases under this section were referred to the Almoner during 1950 and those did not require more than periodic visits.

V.D. Clinics.

The Almoner has continued to attend two sessions weekly and to visit defaulters when possible. No contact tracing has been undertaken, since no such cases have been referred to the Women's Clinic.

In the *V.D. Clinic* sixty-nine new patients were interviewed, an occasion which incidentally gives opportunity for much useful work with unmarried mothers. Constant supervision of attendances is maintained and there is only very rarely an occasion to " write off " a patient as a persistent defaulter—in this connection thirty-seven visits were paid and eighty letters sent. The total number of patients on the register at the end of the year was *thirty*.

Holiday Homes.

As the facilities provided by the County Council become better known, requests for convalescence under this scheme continue to increase. It would be probably correct to say that everyone should benefit to some extent by a few weeks in a holiday home, and yet at the same time the County Council could not afford to send all who ask for this holiday. Each case must therefore be judged on its medical merits, and the general line followed has been whether or not after an illness or an operation the person would materially benefit from two to three weeks' convalescence or his condition prevented from markedly deteriorating.

In these two years the following number of cases were dealt with :—

	Applications Received.	*Rejected as Unsuitable.*	*Actually sent to Homes.*
1950 .	266	90	176
1951 .	332	26	262

Number of cases that entered Homes

	Age Groups											
	0–1		1–5		5–15		15–45		45–65		65 +	
	M	F	M	F	M	F	M	F	M	F	M	F
1950 . .	—	1	5	5	3	2	16	60	16	45	9	14
1951 . .	—	—	3	6	1	3	28	66	38	65	19	33

The Source of the Applications

	Own Doctor	Hospitals	County Almoners	Others
1950 . .	59	48	48	21
1951 . .	97	108	36	21

The great majority went to the Hertfordshire Home, a Voluntary Home at St. Leonards, near Hastings, the others to Homes considered more suitable for their complaint.

Medical Loan Scheme.

Requests for assistance under this scheme have not diminished, and indeed in some areas they have markedly increased. Not only have they increased in volume but also in the variety of the articles asked for—a spinal carriage for a boy who could not be taken outside otherwise, pulleys and lifting apparatus

over beds, and baths for crippled patients, and special feeding and dressing equipment for a person so affected with rheumatoid arthritis that she could not look after herself in bed without this equipment. The number of requests for wheel chairs of various kinds has also multiplied greatly.

Although the District Nurses hold for immediate use a small supply of the commoner articles required in illness, the vast bulk of the equipment issued on loan is obtained from the Loan Depots established in the towns and large villages throughout the County. These Depots are staffed and administered by the British Red Cross Society or the St. John Ambulance Brigade. They act as the agents of the County Council for this work, and the smoothness of the running of the scheme during these past years is evidence of the keen interest taken in it by the members of these two organizations.

It was agreed that articles in contact with infectious diseases such as tuberculosis would not pass through the ordinary Loan Depots, and the equipment for this branch of the Medical Loan Scheme is dealt with direct through County Hall.

During the two years under review Depots have been opened at Hormeads and Watford. Others at Aspenden, Cottered, and Westmill have not been proved warranted and have been closed.

Below is given a list of the places where there are Depots :—

Baldock	Hatfield	Rickmansworth
Barnet	Hertford	Royston
Berkhamsted	Hitchin	St. Albans
Bishop's Stortford	Hoddesdon	Standon
Braughing	Hormeads	Stanstead Abbotts
Bucks Hill	King's Langley	Stevenage
Buntingford	Knebworth	Ware
Chorleywood	Letchworth	Watford
East Barnet	Much Hadham	Welwyn
Harpenden	New Barnet	Welwyn Garden City

SECTION 29—HOME HELP.

The Home Help Scheme continues to demand more than its fair share of administrative time and to produce more than its quota of worries.

In 1948 we employed 16 organizing staff, 66 whole-time and 137 part-time helps and our expenditure was £19,519 from the 5th July, 1948, to the 31st March, 1949. At the end of 1950, we employed 17 organizers, 105 whole-time and 438 part-time helps and spent £66,665 during the financial year 1950–51.

It was to be expected that this rapid development would bring its problems, but the real complexities in this Scheme have arisen from the fact that the Local Health Authority is permitted to make charges. The history of the administration of the Home Help Service in this County is a story of unremitting effort to arrive at a scale of charges which would ensure that the Scheme was not abused and still be reasonable for those who were obliged to use it.

There is a growing body of opinion amongst those in touch with the homes in which the Service is used that the time will soon come—if it has not already come—when the Home Help Scheme should be treated as an essential part of the National Health Service and supplied free. It is perhaps as well that this was not done originally because, in 1948, we had no data to guide us as to the real need for this Service ; but, after four years, our Organizers have a very shrewd idea of which demands are genuine and which are spurious.

The cost of obtaining Home Help is now sufficient to deter those who do not require it. The limit to the number of Home Helps we employ has taught Organizers to give Home Help time where it is most needed. General Practitioners and Nurses now tend to limit certificates recommending Home Help to the really deserving cases.

Changing social circumstances have made the Home Help in her own sphere an essential auxiliary to the Domiciliary Medical Services. Has not the time come for it to be provided free where it is known to be required ?

The financial aspects of the Scheme at present irritate and preoccupy medical administrators and users alike. Time which should be given to directing the Health Service is seriously curtailed by the study of the financial aspects of the Home Help Scheme. The public appreciation of this and other Services provided by the Health Authority is often off-set by discontent at its cost.

Relationships with medical staff who are dependent on Home Helps to get the best results from their work are prejudiced by our threats to withhold help where payments are in arrears. The reports by Dr. Roe, Chest Physician, South-West Herts and Dr. Hounslow, Chest Physician, South Herts (see pages 54–56) will give some inkling of the kind of discussion which almost monopolizes the conferences with Chest Physicians—conferences at which we should be studying the furtherance of all our schemes for the prevention of tuberculosis.

Report of the organizer for 1950 and 1951.

During 1950 the Service again showed considerable expansion, and towards the end of the year it became necessary to open a special office of the Watford Service on the Oxhey Estate.

During the year the demand for help exceeded the establishment laid down by the Health Committee, and it was necessary to allocate to each area in the County a fixed number of hours, based on population and type of area, in order to control the services within the fixed establishment.

The policy of divisionalization was pursued during the year by the appointment of two Divisional Organizers additional to the one existing at the end of 1949.

The expansion of the service, together with the increasing need to control it with efficient organization, led to the accounting work being transferred from the organizers first to divisional offices and then to central offices at County Hall.

Staffing.—Recruitment during 1950 continued to improve, and appointment committees were able to exercise more freedom of choice in the selection of applicants for work.

Although the National Joint Council for Employees of Non-Training Services decided to include Home Helps within their scope, up to the present no separate promulgation of wages or conditions of services has been made.

Service Given.—During the first week in January, 551 householders were provided with help, and during the last week in December, the figure had risen to 880, despite a high sickness rate amongst the Home Helps themselves.

An analysis of the cases assisted during 1950 is given in the table which follows :—

Analysis of Cases Helped from 1st January to 31st December, 1950.

No. of Cases current on 1st January, 1950 : 551.
No. of Cases current on 31st December, 1950 : 880.

			Cases Helped throughout 1950					
			Ordinary Cases					
	Chronic Illness	Blindness	Accidents	Acute Illness	Miscel-laneous	Maternity Cases	Tuberculous Cases	Totals
Householders other than old age pensioners.	254	6	40	643	243	971	188	2,345
Old age pensioners	554	22	16	102	48	—	6	748
Totals.	808	28	56	745	291	971	194	3,093

It is interesting to note that the number of domiciliary confinements for which Home Help was provided during 1950 was 971, against 490 in 1949.

The number of cases in which help was provided for tuberculous households shows a slight reduction during 1950 over 1949, but owing to the increased number of patients who are treated at home while totally confined to bed, the number of hours allocated to these households shows an increase.

Although recruitment of women who are prepared to work in tuberculous households became easier in some districts, in others it remained difficult.

The long term cases are almost entirely those in which help is given to the aged and tuberculous people, and I have to report that an increased number of cases are being referred to organizers by Hospital Almoners and General Practitioners rather than arising from direct applications from the patients themselves.

There is now a much closer liaison between the Home Help Service and the other Health Services.

I should like to place on record again my thanks to all those ladies and gentlemen who have given much time and energy voluntarily to the building up of the Service in other separate localities. Some of the local Committees have disbanded during the year, their work having been completed, but others have remained in being to assist the County Council in any way which may be found desirable—for instance, appointment of Home Helps, social activities, etc.

1951 has been another difficult year for the Home Help Service. A new assessment scale was introduced in May, which gave rise to such a large number of cases of severe hardship, that the present system of appeals was evolved. Staffing has not proved very difficult, with the exception of women willing to work in tuberculous households. The organizing staff has needed very little alteration, but the re-introduction of fractional assessment, with the extra work involved, has resulted in the accounting being absorbed into the County Treasurer's Department, while the assessing is now being done by staff in the County Health Department.

Organizers.—The staff at the end of the year was as follows :—

1 Full-time Central Organizer.
7 Full-time Organizers.
9 Part-time Organizers.

The only change in the organizing staff came about by the resignation of the part-time Organizer for Hertford and district, as the work was increasing and she was unable to increase the time she could give to the service. The Organizer who had previously worked in Harpenden and Boreham Wood was appointed to the Hertford area as a full-time officer, and the part-time organizer in the city of St. Albans increased her hours to full-time and now runs the whole division.

Staffing.—Most organizers have reported that they no longer experience difficulty in recruiting women except for work in tuberculous households. The notable exceptions to this are the areas bordering on Middlesex, where a higher rate of pay is given to Home Helps. Even in these areas, however, the shortage has not yet become acute.

In January, 1951, the County Council was employing :—

98 Full-time.
197 Half-time.
199 Casual.

In December, 1951, the corresponding figures were :—

73 Full-time.
180 Half-time.
144 Casual.

This reduction has come about partly by the deliberate action on the part of Organizers to economize, and partly as a result of householders demanding fewer hours' help per week, following the introduction of fractional assessments.

The analysis of cases helped during the year is as follows :—

Analysis of Cases Helped from 1st January to 31st December, 1951.
Number of cases current on 1st January, 1951 : 880.
Number of cases current on 31st December, 1951 : 993.

	Cases Helped Throughout 1951							
			Ordinary Cases					
	Chronic Illness	Blindness	Accidents	Acute Illness	Miscel-laneous	Maternity Cases	Tuberculous Cases	Totals
Householders other than old age pensioners.	230	7	26	421	290	745	168	1,887
Old age pensioners	735	33	16	54	44	—	11	893
Totals.	965	40	42	475	334	745	179	2,780

It will be seen that during the last week of the year, 113 more cases received help than during the first week, although the wages bill for the last week was approximately 4/5ths of that for the first week.

Ordinary Cases.—The number of chronic sick being attended by Home Helps increases steadily and, as many of these people are entirely dependent on the service for food, fires, etc., it becomes increasingly difficult to deal with emergency cases as they arise. By far the greater number of the long-term cases are also old age pensioners, making small contributions, if any, to the total income of the service.

Maternity Cases.—There has been an appreciable reduction in the number of Home Confinements attended by Home Helps. This can probably be accounted for by the heavy cost of a Home Confinement compared with the low cost of a hospital confinement. Every Organizer has reported that bookings for Home Helps during confinements are cancelled when the Householders are notified of the charge. This may mean that relatives come forward to help, but often the husband takes time off from work, and manages to run the house with instructions from his wife.

Tuberculous Cases.—This disease presents an increasing problem in some areas, where the number of cases goes up week by week and, although all these cases do not need Home Help, those who do, need many hours per week over a long period. All Home Helps have been encouraged to attend for X-ray when the Mass Radiography Unit has been in the neighbourhood, and the response has been good. This has helped in persuading women that the danger of infection is not as high as they may have feared, and some Home Helps have continued with the work, on obtaining a clear X-ray, who might otherwise have asked to have their work changed.

The assessment scale, introduced last May, has had a particularly bad effect on tuberculous patients, whose recovery depends partly on freedom from worry, and in December the Health Committee agreed that special reductions should be made in the cost of the service to these patients where the Chest Physicians felt that circumstances justified this.

Accounts.—The County Treasurer took over responsibility for rendering accounts and collecting money, with the introduction of the new assessment scale in May. The organizers have co-operated by making personal visits when requested to do so by the County Treasurer, but the system still leaves much room for improvement.

General Administration.—Following the report on Juvenile Delinquency, it was suggested that Home Helps might be used to set a family on its feet, if the mother appeared unable to manage alone. An experiment was instituted in the Hertford district and four of the regular Home Helps were approached. They expressed their willingness to try and showed great enthusiasm. No results can be seen as yet, but I hope to be able to report some successful cases in my next annual report.

The Service has now become an integral part of the Nation's life and I am pleased that the women who are at present employed take such a pride in being " Home Helps ".

SECTION 51—MENTAL HEALTH SERVICES.

Mental Deficiency Acts, 1913–1938.

The official Returns to the Board of Control for the years 1950 and 1951 were as follows (an alternation in the form of the report was made for 1951) :—

1950 Return.

	M.	*F.*	*Total.*
I. Particulars of Mental Defectives as on 1st January, 1951.			
(1) Number of Ascertained Mental Defectives found to be " Subject to be dealt with " :—			
(*a*) In Institutions (including cases on licence therefrom) . . — Under 16 years of age	78	42	120
(*a*) In Institutions (including cases on licence therefrom) . . — Aged 16 years and over	316	288	604
(*b*) *Under Guardianship (including cases on licence therefrom) — Under 16 years of age	—	—	—
(*b*) *Under Guardianship (including cases on licence therefrom) — Aged 16 years and over	14	32	46
(*c*) In " places of safety "	5	5	10
(*d*) Under Statutory Supervision (excluding cases on licence) — Under 16 years of age	94	89	183
(*d*) Under Statutory Supervision (excluding cases on licence) — Aged 16 years and over	77	65	142
(*e*) †Action not yet taken under any one of the above headings	—	—	—
Total ascertained cases found to be " subject to be dealt with "	584	521	1,105

	M.	*F.*	*Tl.*			
No. of cases included in (b) to (e) above awaiting removal to an Institution .	44	41	85	—	—	—
‡(2) Number of Mental Defectives not at present " Subject to be dealt with ", but over whom some form of voluntary supervision is maintained :—						
Under 16 years of age				7	7	14
Aged 16 years and over				24	29	53
Total number of mental defectives (1) plus (2) . .				615	557	1,172
(3) Number of Mental Defectives receiving training :—						
(*a*) In day-training centres . — Under 16 years of age				51	44	95
(*a*) In day-training centres . — Aged 16 years and over				1	11	12
(*b*) At home				—	1	1
Total . . .				52	56	108
II. Particulars of cases reported during the year 1950 :—						
(1) Ascertainment.						
(*a*) Cases reported by Local Education Authorities (Section 57, Education Act, 1944) :—						
(i) Under Section 57 (3)				30	22	52
(ii) Under Section 57 (5) :—						
On leaving special schools				7	3	10
On leaving ordinary schools				—	—	—
(*b*) Other ascertained defectives reported during 1950 and found to be " subject to be dealt with "				18	19	37
Total ascertained defectives found to be " subject to be dealt with " during the year				55	44	99
(*c*) Other reported cases ascertained during 1950 who are not at present " subject to be dealt with "				5	4	9
Total number of cases reported during the year . .				60	48	108

	M.	*F.*	*Total.*
(2) Disposal of cases reported during the year.			
(*a*) *Ascertained defectives found to be " subject to be dealt with "*			
(i) Admitted to Institutions	8	8	16
(ii) Placed under Guardianship	1	—	1
(iii) Taken to " places of safety "	2	1	3
(iv) Placed under Statutory Supervision	44	34	78
(v) Died or removed from area	—	1	1
(vi) Action not yet taken	—	—	—
	—	—	—
Total ascertained defectives found to be " subject to be dealt with " (to agree with the total of (1) (*a*) and (1) (*b*) above)	55	44	99
(*b*) *Cases not at present subject to be dealt with.*			
(i) Placed under Voluntary Supervision	5	4	9
(ii) Later found not to be defective	—	—	—
(iii) Died or removed from area	—	—	—
(iv) Action unnecessary	—	—	—
(v) Action not yet taken	—	—	—
	—	—	—
Total cases not at present " subject to be dealt with " (to agree with the numbers entered under (I) (*c*) above)	60	48	108
III. Number of Mental Defectives in Institutions under community care, including voluntary supervision or in " places of safety " on 1st January, 1950, who have ceased to be under any of these forms of care during 1950 :—			
(*a*) Ceased to be under care	—	3	3
(*b*) Died, removed from area, or lost sight of	9	8	17
Total	9	11	20
IV. Of the total number of Mental Defectives known to the Local Health Authority.			
(*a*) Number who have given birth to children during 1950 :—			
(i) After marriage			1
(ii) While unmarried			3
(*b*) Number who have married during 1950	—	2	2

* Number of the defectives under Guardianship who were dealt with under the provisions of Section 8 or 9 : M. 1 ; F. —.

† The numbers returned under this heading (1) (*e*) should be those still regarded as " subject to be dealt with ", irrespective of the date at which they were " reported " or " ascertained ", and should NOT include any cases which have been returned under any one of the preceding headings. They would be not less than those given under heading (2) (*a*) (vi) overleaf.

‡ All cases reported to the Local Health Authority and recognized as mental defective with whom some form of contact is maintained should be included.

1951 RETURN

	During 1951				Total as at 1st January, 1952			
	Under age 16		Aged 16 and over		Under age 16		Aged 16 and over	
	M.	F.	M.	F.	M.	F.	M.	F.
1. *Particulars of cases reported during 1951.*								
(*a*) Cases reported by Local Education Authorities (Section 57, Education Act, 1944) :—								
(i) Under Section 57 (3) . .	15	18	—	—	—	—	—	—
(ii) Under Section 57 (5) :—								
On leaving special schools .	—	—	5	3	—	—	—	—
On leaving ordinary schools .	—	1	—	—	—	—	—	—
(*b*) Cases referred by the police or by the Courts under Section 8 (1) (*a*) (or as a result of other action by the Courts)	—	1	4	2	—	—	—	—
(*c*) Other defectives reported during 1951 :—								
(i) Found " subject to be dealt with "	9	5	10	6	—	—	—	—
(ii) Not at present " subject to be dealt with " . .	9	7	14	16	—	—	—	—
Total number of cases reported during the year	33	32	33	27	—	—	—	—
2. *Disposal of cases.*								
(*a*) Those found " subject to be dealt with ".								
(i) Placed under Statutory Supervision . .	18	18	11	7	99	89	84	74
(ii) Placed under Guardianship * . . .	—	—	—	—	2	1	14	32
(iii) Taken to " Places of Safety " . . .	1	4	—	1	1	5	—	1
(iv) Admitted to Institutions .	5	3	5	3	83	48	332	292
(v) Died or removed from area	—	—	3	—	—	—	—	—
(vi) Action not yet taken .	—	—	—	—	—	—	—	—
(*b*) Those not at present " subject to be dealt with ".								
(i) Placed under Voluntary Supervision . .	9	6	10	11	12	7	31	40
(ii) Later found not to be defective . . .	—	—	—	—	—	—	—	—
(iii) Died or removed from area	—	—	—	—	—	—	—	—
(iv) Action unnecessary .	—	—	—	—	—	—	—	—
(v) Action not yet taken .	—	1	4	5	—	—	—	—
Total of item 2	33	32	33	27	197	150	461	439
3. *Classification of Defectives in the Community on 1st January, 1952.*								
(*a*) Cases included in item 2 (*a*) (i) to (iii) above in need of institutional care :—								
(1) In urgent need of institutional care :—								
(i) Cot and chair cases .	—	—	—	—	2	2	1	—
(ii) Ambulant low grade cases	—	—	—	—	2	2	2	1
(iii) Medium grade cases .	—	—	—	—	9	4	3	5
(iv) High grade cases . .	—	—	—	—	6	—	4	2
(2) Not in urgent need of institutional care :—								
(i) Cot and chair cases .	—	—	—	—	2	1	—	—
(ii) Ambulant low grade cases	—	—	—	—	1	—	—	—
(iii) Medium grade cases .	—	—	—	—	3	4	—	2
(iv) High grade cases . .	—	—	—	—	4	2	2	3
Total of item 3	—	—	—	—	29	15	12	13

	Total as at 1st January, 1952			
	Under age 16		Aged 16 and over	
	M.	F.	M.	F.
(*b*) Of the cases included in item 3 (*a*) overleaf, number in need of institutional care *only* because of poor environment :—				
(i) Medium grade cases .	2	1	—	1
(ii) High grade cases . .	2	—	4	1
Total of item 3 (*b*)	4	1	4	2
(*c*) Of the cases included in items 2 (*a*) (i) and (ii) and 2 (*b*) (i) overleaf, number considered suitable for:—				
(i) Occupation centre . .	74	62	1	14
(ii) Industrial centre . .	—	—	12	9
(iii) Home training . .	1	4	1	6
Total of item 3 (*c*)	75	66	14	29
(*d*) *Number of cases receiving training on 1st January, 1952.*				
(i) In occupation centre .	64	48	1	14
(ii) In industrial centre .	—	—	1	—
(iii) At home . . .	—	2	1	6
Total of item 3 (*d*)	64	50	3	20

4. Number of Mental Defectives who were in Institutions, under Community Care (including Voluntary Supervision) or in " Places of Safety " on 1st January, 1951, who have ceased to be under any of these forms of care during 1951.

	M.	*F.*	*Total.*
(*a*) Ceased to be under care	—	—	—
(*b*) Died, removed from area, or lost sight of . . .	13	15	28
Total	13	15	28

5. Of the total number of mental defectives under Supervision or Guardianship or no longer under care.

(*a*) Number who have given birth to children while unmarried during 1951 1

(*b*) Number who have married during 1951 . . . —

* Number of the defectives under guardianship on 1st January, 1952, who were dealt ith under the provisions of Section 8 or 9 : M. 2 ; F. nil.

1,416 domiciliary visits were made by the Social Workers during 1950 and 2,610 in 1951. In addition, the Organizer for the Occupation Centres paid routine visits to all cases recommended for admission to these Centres. Visits were paid by the Social Workers to cases under community care for whom the Authority is responsible, i.e. those detained under Guardianship Orders, and cases placed under Statutory supervision and voluntary supervision.

Lay supervision is also undertaken on behalf of other Authorities for patients resident in this County. There was a considerable increase in this latter work during the middle of 1950, when the National Association for Mental Health gave up their work in connection with mental defectives, and requests were received from numerous Authorities for the Social Workers of this Authority to provide the necessary lay supervision. This is undertaken on

a reciprocal basis with the Authorities concerned, who have agreed to assist similarly for Hertfordshire patients resident in their areas. Visits were also paid to defectives on Licence from Certified Institutions to addresses in this County ; and the Social Workers further assisted the Medical Superintendents, where possible, in selecting suitable persons to receive defectives on licence from Institutions. Reports were provided on home conditions for the information of the Visitors when seeing patients whose Orders were due to be continued under Section 11 of the Mental Deficiency Act, 1913.

The official return to the Board of Control only shows the disposal of cases reported to be mentally defective during 1950 and 1951. The following information covers all actions taken by the Local Health Authority whereby Orders under the Mental Deficiency Acts, for the detention of patients were obtained during the two years :—

	1950.	*1951.*
Orders obtained on presentation of Petitions by the Authority's Social Workers.		
Hertfordshire patients detained in Institutions	26	46
Hertfordshire patients placed under guardianship	1	4
Varying Orders.		
Varying Orders were obtained sending Hertfordshire patients to Institutions who were formerly under guardianship	6	2
Court Orders under Section 8 of the Mental Deficiency Act, 1913.		
Orders made by the Courts during the year	4	5
Patients sent to Institutions	3	5
Placed under guardianship : the Social Workers attended the Courts when these and other cases subject to be dealt with under the Mental Deficiency Acts were heard	1	—
Patients dealt with under Section 3, Mental Deficiency Act, 1913.		
Patients placed in Institutions at the instance of their parents, and the Social Workers assisted in the preparation of the necessary documents and the arrangements for placing the defectives	2	—
Orders obtained by Other Authorities on behalf of Hertfordshire.		
Hertfordshire patients detained in Institutions	5	4
Hertfordshire patients placed under guardianship	1	1
Orders obtained by Hertfordshire on behalf of other Authorities.		
Out-County patients detained in Institutions	9	9
Out-County patients now detained in Institutions, Varying Orders having been obtained by Hertfordshire transferring them from guardianship	2	—

The position with regard to accommodation in certified Institutions had deteriorated during 1950 but picked up during 1951. The waiting list since the 5th July, 1948, had grown from 60 to 85 by the end of 1950, but by the end of 1951 this number had been reduced to 70. During 1950, 42 patients were placed in Institutions under Order, and in addition, 8 patients were admitted to Institutions as to " places of safety " pending the presentation of Petitions for Orders detaining them.

During 1951, 60 patients were placed in Institutions or placed under guardianship following Orders made by Judicial Authorities. Five cases were in " places of safety " at the end of 1951, three of whom were being kept under observation in Institutions prior to presentation of petitions for Orders.

Despite this, however, the waiting list gives cause for great concern to all associated with the welfare of mental defectives.

The continued presence of low-grade defectives in their homes often disrupts family life, apart from the adverse effect on the defectives themselves when they are not receiving the care and training necessary for their welfare. Every effort is made to see that due priority is awarded to every case on the waiting list, and that the vacancies which do become available are used for the most urgent cases. This is explained by the Social Workers to the relatives, but the position is still very difficult when dealing with cases who should be in Institutions and are causing disharmony at home.

To assist the Hospital Authorities in dealing with the waiting list, a system of priorities was introduced during 1951, and the circumstances of all cases were reviewed by the Authority's Social Workers, and the Regional Hospital Boards were informed of the priorities in each case. The degrees of priority used were as under :—

(1) *Most Urgent.*

To include (*a*) Cases where immediate removal to an Institution is the only real solution, and where continued presence in the home imposes an unbearable hardship on the other members ; and

(*b*) Cases dangerous to the community as a whole if they remain at large.

(2) *Urgent.*

Where Conditions 1 (*a*) and 1 (*b*) are less severe, but the persons caring for the defective are carrying on under very real difficulties.

(3) *Priority.*

(*a*) Where cases are occupying accommodation in either Health Service or Educational establishments, despite having been ascertained to be defective, and representations have been made to the County Council for action to be taken for securing institutional accommodation under the M.D. Acts.

(*b*) Cases where some relief is obtained by the patients attending Occupation Centres, but there is still more than a reasonable strain having to be borne by the families in coping with the patients at home, e.g. cases where normal children are adversely affected by the presence of a defective and the parents request removal.

(4) *Non-Priority.*

Where home care is satisfactory, and no priority seems deserved, but the parents ask for Institutional care ; or where no request for Institutional care has been made but it is considered as probable that changes in the family's circumstances in the future will necessitate priority action.

The 70 cases awaiting vacancies in Institutions at the end of 1951 were composed of :—

Most urgent (1) . . .	8
Urgent (2)	15
Priority (3)	22
Non-Priority (4) . . .	25
	70

The Medical Superintendents of Cell Barnes Hospital and the South Ockendon Group Hospitals have been most sympathetic and helpful, and in addition to the numbers given permanent places, 16 cases were accepted for short stay, either to enable the parents to gain a respite from their responsibilities or to assist when domestic difficulties made it imperative for the defectives to be removed for a short time.

Occupation Centres.

It has recently been stated that there are in the whole country just over 57,000 mental defectives in institutions, and some 50,000 living in their own homes. Those living at home vary in the degree to which they are defective, many conducting themselves as ordinary members of the community, while others require supervision over most of their actions.

Occupation Centres have been opened in five of the main towns in the County in an endeavour to help the defective children, and they are brought to those Centres from most parts of Hertfordshire. The children attend at these Centres during the five week-days for the forty weeks of the year during

which the ordinary day schools are open, with benefit not only to themselves, but also to their families.

A few of the older suitable adolescents are given training in the Mental Deficiency Colonies, but this provision may be extended and amplified during the next few years.

None of the Occupation Centres are held in specially built buildings. The two at Barnet and Hitchin are in County Council property—one a Health Centre—and the one at St. Albans is in Cell Barnes Colony. The other two, at Watford and Hertford, are held in halls which are too small for the number and age groups now in attendance at them, and are without the amenities necessary for both the children and the staff.

The Organizer of the Centres reports as follows :—

At the beginning of 1950 there were 92 children attending the day occupation Centres in Barnet, Hertford, Hitchin, St. Albans, and Watford, and in December, 1951, there were 128. These Centres provide training and occupation for mentally defective children excluded from school under Section 57 of the Education Act, 1944, and reported to the Local Health Authority on being found to be suffering from : " A disability of mind of such a nature and to such an extent as to make them incapable of receiving education at school."

The shortage of institutional accommodation means that children urgently in need of such care must remain in their own homes, to be an intolerable burden upon their families if no facilities for training are available. Attendance is optional.

The majority of children accepted in the Centres are between the ages of 5 and 16 years, although chronological age is not necessarily the determining factor. Feeble-minded and imbeciles are catered for, with an average mental age of 3 to 7 years, but when the children reach the age of 16 years they are not automatically discharged, although it is hoped that the higher grade defectives may, at a later date, progress to more advanced training Centres, there to learn a trade and subsequently take their place alongside other members of the community.

Transport is still the greatest problem and the majority of children are now conveyed by ambulance or coach.

Each Centre gave a Christmas party where every child received a present from Father Christmas, and the Barnet, Hertford, St. Albans, and Watford Centres each held their first Open Day, giving a performance in costume and display of handiwork, which showed great credit to the staff.

The Barnet Centre removed from Jellicoe Hall to " Fieldways ", Wellhouse Lane, in May, 1951, and subsequently held an Open Day for parents to see the new premises and the children at work.

Attempts have been made to find suitable premises in the Dacorum area where some twenty children are in urgent need of training. Nine of these children attend the Watford Centre, but Watford and Oxhey children are on the waiting list and with the opening of a Centre in Hemel Hempstead both the Watford and Dacorum waiting lists could be cleared.

The National Association of Parents of Backward Children has formed groups round the Barnet, Hertford, St. Albans, and Watford Occupation Centres, and holds regular meetings when speakers are invited to talk to the parents and opportunities are given for questions afterwards. Not only has the Association enlarged its membership in this way, but it has shown its appreciation of the work done for the children in the Occupation Centres in a practical way. The Barnet Group are saving for a Radiogram for their Centre ; the Hertford Group have approached the Mayor who has generously allocated part of a Trust Fund to purchase a Radio for their Centre ; and who also, accompanied by the Mayoress, attended the Open Day at Christmas. The St. Albans and Watford Groups have both collected enough money to give the children at their Centres a splendid Christmas Party.

Appreciation is felt by all the staff for the way in which the Parents have co-operated with them, and for their grateful thanks.

Mental Treatment.

In my Report for 1949, details were given of the arrangements for mental treatment prior to the Health Act and of the changes that resulted from the operation of this Act, with an explanation of the procedure followed.

The following report of the Deputy Welfare Officer, who is also the Senior Authorized Officer, gives particulars of the actions necessary during 1950 and 1951 :—

Report of the Senior Authorized Officer.

During the two years under review, cases as follows were dealt with. The Divisional Welfare Officers in the seven areas of the County continued to act as " Authorized Officers " for the purposes of the Lunacy and Mental Treatment Acts as amended by the National Health Service Acts, 1946 and 1949, and the administrative arrangements in this connection worked smoothly during the year. Generally speaking, cases arising in that part of the County within the North-East Metropolitan Region are dealt with at Claybury Mental Hospital, those from the Northern part of the County in the North-West Metropolitan Region at Three Counties Hospital, those from the Southern part of the County in the North-West Metropolitan Region at either Napsbury or St. Bernards' Hospitals, and those from the small portion of the County in the East Anglian Region at Fulbourn Hospital :—

	1950				1951			
	Men	Women	Children	Total	Men	Women	Children	Total
(1) *Reception Orders.*								
Admitted direct to hospital	41	58	—	99	39	46	—	85
Admitted to hospital after " observation " under Sections 20–21	8	100	—	108	4	55	—	59
By action subsequent to making of Urgency Order, or admitted to hospital under Orders made on petition	30	16	—	46	31	45	1	77
By action subsequent to admission as voluntary patient	2	3	—	5	1	3	—	4
By action subsequent to admission as temporary patient	—	—	—	—	—	1	—	1
(2) *Voluntary Patients.*								
* Admitted direct to hospital	18	34	—	52	20	16	2	38
Admitted to hospital after " observation " under Sections 20–21	9	29	1	39	15	40	—	55
By action subsequent to making of Urgency Order	30	13	—	43	41	28	—	69
(3) *Temporary Patients.*								
Admitted direct to hospital	2	6	—	8	1	5	—	6
Admitted to hospital after " observation " under Sections 20–21	—	8	—	8	1	8	—	9
By action subsequent to making of Urgency Order	3	2	—	5	14	4	—	18
By action subsequent to admission as Voluntary patient	—	—	—	—	1	—	—	1
(4) *Urgency Orders*	87	36	—	123	119	86	2	207
(5) " *Observation* " *Cases.*								
Patients admitted to " Observation " Wards under Sections 20–21 (including those above who were subsequently admitted to mental hospital)	25	197	1	223	22	147	—	169
(6) * *Persons recommended for Clinical Treatment and other persons advised by the authorized officers*	39	64	—	103	54	50	2	106
Totals	294	566	2	862	363	534	7	904

* These figures do not include many persons dealt with privately or otherwise than by reference to the " Authorized Officers ".

In addition to the above figures, Reception Orders, etc., in respect of 18 men and 47 women (16 men and 47 women in 1950) originally admitted from outside the County of Hertford to mental hospitals in the County were dealt with by the Authorized Officer for the St. Albans Division.

The following is a comparison of the figures for 1949, 1950, and 1951.

	1949.	*1950.*	*1951.*
(*a*) Total number of individuals dealt with by authorized officers	642	623	629
(*b*) Voluntary patients	99	134	162
(*c*) Temporary patients	22	21	34
(*d*) Certified Patients	295	258	226
(*e*) Urgency Orders	27	123	207

Attention is drawn to the continued increased use of the " Urgency Order " which is in conformity with modern practice but is also to some extent due to the continued lack of accommodation in " Observation " Wards in Hospitals in the County under Sections 20–21.

In 1950 of the 223 cases admitted to " observation " wards under Sections 20–21, 108 were subsequently the subject of Reception Orders, 39 became voluntary patients, 8 became temporary patients, 5 died, 3 were admitted to residential accommodation under Section 21 of the National Assistance Act, 1948, 9 were otherwise dealt with, and 51 were discharged without further action under the Acts.

Of the 169 cases admitted to " observation " wards under Sections 20–21, in 1951, 59 were subsequently the subject of Reception Orders, 55 became voluntary patients, 9 became temporary patients, 6 died, 1 was admitted to residential accommodation under Section 21 of the National Assistance Act, 1948, 8 were otherwise dealt with, and 31 were discharged without further action under the Acts.

ENVIRONMENTAL HYGIENE AND SANITARY ADMINISTRATION.

We have now seen two full years of milk administration under the new legislation which gave the Ministry of Agriculture and Fisheries the control of milk production on the farm. Early hopes that the new legislation would simplify administration by creating a central authority do not appear to have been justified and milk work has resolved itself into several " compartments " with a different authority responsible for each stage from production to final distribution. Attempts have been made during 1950 and 1951 to improve liaison between the various authorities responsible for the control and cleanliness of milk and details are given later in this report.

As I reported in 1949, the responsibility for licensing pasteurizing plants has been given to the County Council in so far as it is a Food and Drugs Authority. We have aimed at a high standard of pasteurizing plant supervision and have endeavoured not only to gain practical knowledge of the various types of plant, but also every effort has been made to see that such equipment is working efficiently and some research has been carried out on the various aspects of plant design.

Our work has broadened in other fields and such problems as refuse disposal and the supervision of the ever increasing number of licensed refuse tips in the county have absorbed a considerable amount of time and energy. More and more of our county is being dug up to provide sand and gravel for the building industry and it has become even more imperative to see that the gaping holes and unproductive areas of land which are left are filled in where possible without undue nuisance or inconvenience being caused to the local inhabitants.

1. Milk and Dairies.

(*a*) *Milk (Special Designation) Regulations.*

In my last report I described how the work of supervising milk production from both designated and non-designated farms has now become the responsibility of the Ministry of Agriculture and Fisheries. Since the change in administration, I have served as a member of the Milk Sub-Committee of the Hertfordshire Agricultural Executive Committee and proposals have been put forward from time to time to secure effective liaison between the four Authorities who are now concerned with the health aspect of milk production and distribution—the Ministry of Agriculture and Fisheries as being responsible for the supervision of farm milk production, Food and Drugs Authorities who are responsible for the supervision of pasteurizing establishments, Local Authorities who register dairies where milk is distributed, and the County Council with its biological sampling scheme. It is obvious that if the work of these Authorities is to be of the utmost value there must be a close link between the milk sampling activities of each and an interchange of information on sampling results. While arrangements have been made for unsatisfactory sample results to be passed on to the responsible authority to enable the necessary follow up work to be done, efforts to obtain liaison between the Ministry of Agriculture and Fisheries and Local Authorities regarding the structural alterations to farm buildings and drainage works proved unsuccessful. Local Authorities have responsibilities under the Town and Country Planning Acts, the Public Health Acts, and the Model Bye-laws with regard to farm buildings and drainage and it is extremely desirable that the Ministry of Agriculture and Fisheries, who may for instance have recommended the building of new cowsheds or extensive drainage alterations at a particular farm, should co-operate in full with the District Council to enable the best results to be obtained.

During 1950 arrangements were made to report to the County Agricultural Executive Committee breaches in the Milk and Dairies Regulations in so far as they include the sealing and labelling of churns and this arrangement continues. Under the Biological Milk Sampling Programme our Sampling Officers visit all farms within the County, and details of omissions to seal and label churns are reported so that the producers' attention can be drawn to this contravention of the Regulations. It is altogether wrong for a farmer who has produced good milk under a special designation to have it confused at the receiving dairy with milk of lesser quality because of his omission to label and seal the churns. Conversely, it is unsatisfactory from a public health stand point for non-designated milk, which may not always be of a high standard, to become confused with designated milk at a dairy and sold as milk of the higher quality.

(*b*) *The Supervision of Pasteurizing Plants.*

This work under the Milk (Special Designation) (Pasteurized and Sterilized Milk) Regulations, 1949, has satisfactorily continued. The supervision of pasteurizing establishments demands a considerable amount of technical knowledge together with its practical application if good results are to be obtained. The dairyman responsible for the running of a plant has a great responsibility for the whole case for pasteurization on the public health side depends on the milk being treated by heat for a period of time sufficient to kill off any pathogenic organism present. It must be remembered that District Medical Officers of Health have powers under Part VII of the Milk and Dairies Regulations, 1949, to divert milk known to contain certain disease organisms, for pasteurization. If the pasteurizing process is inefficient, no purpose is served by diversion. With this in mind we have endeavoured to obtain samples from pasteurizing plants as frequently as possible, and certainly not less than once per week, and to take action immediately a failure is reported.

There are three main types of pasteurizing plant in use in the County. The High Temperature Short Time plant which subjects milk to a pasteurizing temperature of not less than 161° F. for a period of not less than fifteen seconds ; the batch holder which heats and retains the milk at a temperature between 145° and 150° F. for not less than thirty minutes, and a modification of the batch holder which subjects the milk to the same time/temperature treatment as the holder plant but the operation of which is controlled automatically to enable a series of holding compartments to be filled and emptied so that the process is continuous.

Some experimental work has been carried out to detect the limitations of various types of plant and equipment. In the " holder " plants especially, there is sometimes a tendency for foam to be produced during the process of heating and holding the milk. The temperature of this foam on the surface of the milk in the holder may be many degrees lower than the temperature of the main body of the milk and where, on emptying the holder, the foam is carried down in a solid layer, the final discharge could possibly contain living organisms normally destroyed by pasteurization. It is often possible to reduce this foam by regulating the position or speed of the agitating paddles in the holder.

Another very frequent cause of milk being inefficiently pasteurized is because of a forward flow through a leaking milk outlet valve during the " holding " period of pasteurization. Fortunately, this defect has been given a fair amount of attention by the Dairy Industry and there are now reliable outlet cocks available for batch pasteurizers which prevent a forward flow of milk passing to the finished milk section by allowing forward drippings to flow past the seat of the outlet valve and run to waste.

The Continuous Flow Type of treatment plant is virtually a series of batch pasteurizers, the filling and emptying of which is automatically controlled and regulated. These plants have shown that while they possess advantages in supplying a continuous flow of treated milk, it is not always possible to know what is going on in each individual holder during processing and as the thermographs only provide a record of the pre-heated milk entering the plant and the heated milk leaving it, fluctuations in milk temperature in the holders generally remain unrecorded.

Throughout the year we have obtained consistently good results from the High Temperature Short Time type of plant. Although control is mainly automatic, these pasteurizers are not absolutely foolproof. One of the most important items of equipment on the High Temperature Short Time plant is the flow diversion valve which automatically diverts insufficiently heat-treated milk back for re-treatment. Everything depends on the reliability with which this valve functions, together with its speed of operation and the accuracy with which it is set. Fortunately, modern High Temperature Short Time plants are fitted with very fast-acting flow diversion valves, and diversion occurs in a fraction of a second, thereby preventing inadequately treated milk passing forward. From time to time routine checks are made on the efficiency of flow diversion valves, artificial diversion being produced by turning down the steam supplying the heating section of the plant. This is followed by interval sampling at the outlet of the plant to detect any forward flow of semi-pasteurized milk.

As a further check on pasteurizing efficiency an occasional biological sample is obtained at pasteurizing plants for the detection of tubercle bacilli and Br. abortus, two of the more common pathogens found in raw mixed milk, but which do not survive the temperatures obtained in efficient pasteurization. No evidence of surviving tubercle or brucella organisms has so far come to light from these special biological samples.

The following Table shows an analysis of the 1980 samples of pasteurized milk which were taken by the two Sampling Officers during 1950 and 1951.

TABLE 25.

YEAR 1950.

	No. in County	No. of Samples	No. failing phosphatase test	Percentage
H.T.S.T. plants . .	5	330	2	0·61
Batch holder pasteurizers .	9	384	4	1·04
Batch-holder plants coupled to obtain continuous flow	2	214	9	4·21
YEAR 1951.				
H.T.S.T. plants . .	6	344	—	—
Batch-holder pasteurizers .	10	620	18	2·90
Batch-holder plants coupled to obtain continuous flow	1	98	3	3·06

It will be noticed from the above Table that High Temperature Short Time plants have shown up as being very reliable while by far the greater number of phosphatase failures were in samples of milk treated by the continuous flow holder process. As mentioned earlier in my report, in this latter type of plant, filling, holding, and emptying is controlled mechanically and therefore the timing of the motors operating the various valves is of great importance. Secondly, it is not the usual practice to fit recording thermometers in the individual holding sections and heat losses during holding can go unnoticed until discharge of the milk takes place at the end of the holding period. A recording thermometer is usually fitted at the discharge point to show the " outlet temperature " of the milk. While this may provide an accurate record of " outlet " milk temperatures, a considerable volume of milk may leave the plant at a temperature well below the required figure before the fact is recorded on the thermograph and acted upon by the operator.

During 1950 the County Health Inspector made 215 visits to the sixteen pasteurizing establishments then in the County, while in 1951, 214 inspections were carried out. Good progress has been made in the standard of dairies equipped with pasteurizing plants and in seven cases considerable structural improvements were effected to enable a higher standard of hygiene and working efficiency to be obtained.

(c) Sampling for the Detection of the Tubercle Bacillus.

The Biological Milk Sampling Scheme as described in my Annual Report for 1949 has been continued on the same lines. It is believed that our Scheme is perhaps more comprehensive and better documented than is usual, and it has been suggested that it might be useful and interesting if we could put on record the results which we have accummulated within the last five years. These will be found in the following table:—

TABLE 26.

RESULT OF MILK SAMPLES TAKEN FOR T.B. EXAMINATION.

Year	Total No. of Completed Tests *	Non-Designated			Accredited			Tuberculin Tested		
		Neg.	Pos.	%	Neg.	Pos.	%	Neg.	Pos.	%
1947	280	132	9	6·38	131	8	5·76	—	—	—
1948	823	559	14	2·44	234	16	6·4	—	—	—
1949	765	462	13	2·74	164	12	6·81	113	1	0·88
1950	1,161	513	23	4·41	167	11	6·18	447	—	—
1951	1,224	442	16	3·49	173	10	5·46	567	3	0·53

* This figure does not represent the total number of samples taken as in some cases guinea-pigs died prematurely before a result could be obtained.

As a result of these positive samples the following animals were removed from farms under the Tuberculosis Order, 1938, or sent for slaughter during the period between the taking of the sample and the Veterinary inquiry :—

1947 Twelve cattle slaughtered. In addition in six more cases there was evidence that suspicious animals had been removed from the various positive herds and sold to the Knacker for slaughter.

1948 Eleven tuberculous animals were taken for slaughter from accredited herds and nine from non-designated herds.

1949 Fifteen tuberculous cattle were slaughtered during the year while in ten cases suspicious animals were removed from the herds and sold for slaughter.

1950 Eight cattle were slaughtered from accredited herds and fifteen from non-designated herds while in five cases suspicious animals were removed from positive herds and sent for slaughter.

1951 Six cattle were slaughtered from accredited herds and fourteen from non-designated herds. Fifteen suspicious animals were removed from positive herds and sent for slaughter.

It should be noticed that there was a positive result in 1949 from a tuberculin tested herd. The animal in question was found as a result of our biological scheme. The herd had previously been inspected by the veterinary officer and the cow had not re-acted to the tuberculin test. The offending animal was quickly found by clinical examination when the positive sample was reported. It is, of course, rare to find an animal excreting tubercle in a tuberculin tested herd and the incident is recorded to show that such sampling is of value. The three positive samples from tuberculin tested herds in 1951 failed to bring to light the excreting animals and subsequent tests all proved negative.

The practice of taking biological samples at the farms where the milk is produced has been continued. This simplifies the work of tracing infected animals at the farm and it has been found from experience that where biological samples are taken at retail dairies, there is always doubt as to the origin of the milk, especially at dairies where the milk is bulked.

The three cornered liaison scheme which exists between the Divisional Veterinary Officer, the District Medical Officer and the County Medical Officer, has been successfully continued. Positive samples are immediately reported to both the District Medical Officer and the Divisional Veterinary Officer, the former for his powers for stopping or diverting the milk for pasteurization and the latter for the subsequent herd investigation and removal of infected animals under the Tuberculosis Order, 1938. The fact that the County Council carries out this biological sampling is advantageous because a steady flow of samples to the various laboratories used can be maintained. The Divisional Veterinary Officer operates over a number of counties and it is easier for the County Health Department to keep in touch with him than would be the case for the thirty-four individual district councils. In sampling at county level we now get over a thousand samples a year from which we can, after analysis, deduce something, whereas individual district councils sampling on their own accord would have so few results that they would be unlikely to get any worthwhile statistics. The district councils lose nothing by the present system because, as has been shown, the results of our samples are made known to them and we believe all in fact welcome the Scheme.

(*d*) *Brucella infections in Milk.*

The five laboratories which receive our biological samples are all examining the milk not only for the presence of the tubercle organism, but also for Brucella abortus—the organism which causes contagious abortion in cattle and undulant fever in man. The following Table shows the number of brucella positive milks in 1950 and 1951 :—

TABLE 27.

YEAR 1950.

	No. of Completed Tests	Results		Percentage of Positive Samples
		Positive	Negative	
Tuberculin tested . .	447	36	411	8·05
Accredited . . .	179	23	156	12·85
Non-Designated . .	536	50	486	9·33
YEAR 1951.				
Tuberculin . . .	539	58	481	10·76
Accredited . . .	162	20	142	12·35
Non-Designated . .	397	43	354	10·83

It is extraordinarily difficult to assess the significance of these results. Very little is known of the duration of the excretion of this organism once a cow has been infected. These tests are taken on bulk samples when one infected cow could infect the bulk but by the same token every cow contributing to the sample may equally well be infected. So far no intensive study of the excretion history of an individual cow has to my knowledge been undertaken.

It is known that brucella abortus and the causative organism of undulant fever in man are, in the laboratory, identical organisms. Elsewhere in my report I have commented on the comparative rarity of this condition amongst the population. There are three possible explanations of this anomaly—(a) that a great many cases are missed because the symptoms pass unnoticed ; (b) that most people have acquired a natural resistance to the infection, or (c) that there is some secondary factor involved which must operate before the organism can cause infection in the human being.

(e) 'Q' Fever in Milk.

During 1950 an inquiry arose relating to the presence of a rickettsia organism in a bulk sample of milk. This was discovered by one of the laboratories carrying out our biological milk testing. This laboratory had been bulking up portions of our milk samples for 'Q' Fever examination and a sample representing four dairy herds in this County was shown to contain the organism.

'Q' Fever is a disease which has come into prominence during the last few years. It is carried by a tick which while feeding on the blood of cattle inoculates them with the rickettsia organism. The animals themselves show no physiological change, but the rickettsia can be excreted in the milk and is presumably present in the dust of slaughter-houses. The symptoms in man are those of an atypical pneumonia. The infection was observed on a large scale in slaughter-house workers in Queensland, Australia. Further cases have been noted in America and there have been one or two outbreaks in this country.

Our own inquiries were unsuccessful in establishing the animal or animals which gave rise to the positive bulk sample. The herds which were represented in the bulk sample were investigated thoroughly but no further excretion of the organism could be established. Unfortunately several cattle from one of the herds concerned had been sold for slaughter and it can only be presumed that either the affected animal had ceased to excrete the organism, or else had been slaughtered.

(f) Milk in Schools Scheme.

As in 1949 all school departments, Day Nurseries and Nursery Schools were supplied with pasteurized or tuberculin tested milk. The following

Table gives the proportion of the various grades of milk supplied to school departments in 1950 and 1951 :—

TABLE 28.

YEAR 1950.

Dairies	Grade of Milk	School Departments	Nurseries
63	Pasteurized . .	334	39
6	Tuberculin Tested .	8	—
	YEAR 1951.		
56	Pasteurized . .	343	42
5	Tuberculin Tested .	8	—

As was explained in my 1949 Report, " heat-treated " milk is now no longer supplied as this description for a certain class of milk became obsolete under the Milk (Special Designation) (Pasteurized and Sterilized Milk) Regulations, 1949. It then becomes necessary for those dairymen who were heat-treating milk to obtain a pasteurizer's licence and for their premises to comply with the provisions of those Regulations.

Schools and nurseries are visited by the County Sampling Officers and the milk supplied by each individual dealer is tested at least twice a term. Pasteurized milk has to comply with the phosphatase test to ensure that it has been subjected to a correct temperature for the specified period of time. A modified methylene blue test is also used to determine the cleanliness of pasteurized milk. Tuberculin tested milk has also to comply with a methylene blue reduction test. The following Table shows the results of the samples taken.

TABLE 29.

YEAR 1950.

	No. of Samples	Phosphatase Test		Methylene Blue Test	
		Pass	Fail	Pass	Fail
Pasteurized . . .	447	430	13	442	5
Tuberculin tested .	62	—	—	55	7
Totals . . .	509	430	13	497	12
YEAR 1951.					
Pasteurized . . .	409	404	5	403	6
Tuberculin tested .	31	—	—	29	2
Totals . .	440	404	5	432	8

Thirteen phosphatase failures during 1950 cannot be described as satisfactory, but some of these failures were in fact due to raw tuberculin tested milk having been supplied on infrequent occasions by dealers who had normally undertaken to supply pasteurized milk. This practice is frowned upon and the sample is recorded as a " failure ". There was a general improvement in 1951.

Throughout the two years liaison has been maintained with the local authorities and the Ministry of Agriculture and Fisheries in the case of tuberculin tested milk samples which failed the prescribed test when taken at the

school. If the milk is pasteurized and a failing sample is obtained then it is possible for an officer from my Department to investigate the cause at the plant where the milk is processed, provided it is within the licensing area of the County Council. Information regarding other pasteurized milk failures are forwarded to the Licensing Authority for the plant in question. Where a raw tuberculin tested milk fails the methylene blue test, the Area Bacteriologist of the National Milk Testing Service is informed and also the County Agricultural Executive Committee. This enables the farm to be visited and samples to be taken to detect any trouble which may have arisen in methods of production or distribution.

In some cases it is found that where a sample fails, the fault lies not at the farm where the milk is produced or the plant where it may have been pasteurized but at the " retail dairy " stage where the milk may finally have been bottled. The District Councils are responsible for registering these retail dairies and follow-up visits are made by their Officers whenever trouble is suspected at such premises.

School Canteen Milk.

Towards the end of 1951 the Central Purchasing Department made new contracts for the supply of milk to school canteens, and in all cases dairymen are supplying pasteurized milk. While it may be said that canteen milk is generally used for cooking purposes and is therefore subject to heat in one form or another, there is always a chance that it may be used raw on occasion and an unsatisfactory grade of milk could only be treated with suspicion. Pasteurized milk is completely safe and wholesome provided, of course, the pasteurizing process has been conscientiously carried out. It is easily tested by means of the phosphatase test.

Arrangements have now been made to include canteen milk supplies in a Sampling Scheme to ensure that it has been properly processed. While at the end of 1951 there were 323 school canteens in the County including those at nursery schools it will not be difficult to cover these in a Sampling Scheme, as in the majority of cases, pasteurized milk is supplied by dairies which are already being sampled or supervised by the County's Officers either through the Milk in Schools Scheme or through our responsibilities for the supervision of pasteurizing establishments in the Food and Drugs area of the County. Table 30 shows the result of school canteen milk samples during 1951.

Table 30.

Canteen Milk Sampling in 1951.

Grade	No. of Samples	Phosphate Test		Methylene Blue Test	
		Pass	Fail	Pass	Fail
Pasteurized . .	18	18	—	18	—
Tuberculin Tested .	1	—	—	1	—

1. Canteen and Food Premises.

Sanitary Inspectors of District Councils throughout the County are being encouraged to visit school canteens in common with other premises which are engaged in catering. This includes inspection of central cooking depots. In some instances Sanitary Inspectors were already visiting school canteens as part of their duties and it is to be hoped that these Officers will continue to make regular routine inspections so that premises concerned with the preparation of food under the School Meals Scheme will in no way fail to comply with the provisions of Section 13 of the Food and Drugs Act, 1938, and of the Food Byelaws made under that Act which have now been more or less universally adopted.

Food Poisoning.

The record of the school meals service was a good one, since throughout 1950 no outbreak of food poisoning was reported from any of the Council's Schools. The summer was wet and cold, so that the storage of perishable foodstuffs during this season was easier than usual. Two suspected outbreaks of a minor nature occured at Schools in 1951 but the subsequent inquiries did not reveal the cause and there were no further cases.

During 1951 there was an unusual outbreak of food poisoning at Broxbourne which affected some of the local population. The local practitioners, the District Medical Officer and the County Medical and Health Visiting Staff combined forces to tackle this short but acutely sharp outbreak. The source of the outbreak was traced to tinned French ham which was found to be contaminated with organisms of the salmonella group. The particular strain of the organism was an unusual one and the name " salmonella broxbourne " was temporarily given to it. The claim to fame was short lived as on further inquiry it was established that a similar strain had been responsible for an outbreak of food poisoning in Vienna and had been isolated a month or two previous to the Broxbourne outbreak. The organism had therefore earned the title of salmonella Wien.

In all 59 people ate the infected ham. Of the 49 affected, 47 had gastro-enteritis only and in 2 this merged into an enteric-like illness. In addition, there were 2 persons at risk (with positive stools) who had no initial gastro-enteritis but who developed clinical enteric-like illness after incubation periods of five and seven days respectively. Eight symptomless excreters were detected. Of the persons who had eaten the infected ham 57 could be examined and the organism was isolated from the fæces of all of them. The other two persons had already left the district.

The outbreak is reported on in detail in the Monthly Bulletin of the Ministry of Health and the Public Health Laboratory Service, No. 10, August, 1951.

2. Swimming Baths.

Regular sampling was continued at swimming baths used by schools. The baths in the County can be divided into two types—those using the continuous flow and pressure sand filtration system, with automatic chlorination—and those using the " fill and empty " system in which the water is replaced completely from time to time. In the latter type the chlorine for sterilizing the water is usually added manually in the form of a hypochlorite solution.

Table 31 shows the results obtained in sampling from the various baths.

Table 31.

Sampling Results—Swimming Baths.

	1950				1951			
	No. of samples	Satis-factory	Not satis-factory	% not satis-factory	No. of samples	Satis-factory	Not satis-factory	% not satis-factory
Continuous flow (21 baths) .	214	207	7	3·27	202	201	1	0·50
Fill and empty (4 baths) .	41	27	14	34·15	42	29	13	30·95
Total .	255	234	21	8·24	244	230	14	5·74

The continuous flow type of bath continued to give good results during the two years but considerable trouble was experienced with two of the " fill and empty " baths. Unsatisfactory samples were almost invariably due to an inadequate free chlorine content in the water. This results in a failure to prevent the multiplication of organisms or algæ. Once a bath is allowed to become organically contaminated, great quantities of chlorine are absorbed by the organic matter without a residuum of free chlorine being maintained to prevent the multiplication of organisms subsequently introduced into the pool. The control of each pool has been tightened up and great improvements have been noticed in recent samples taken.

All baths using the " fill and empty " system should be emptied regularly and certainly at intervals not greater than three weeks. Emptying and refilling may be required more frequently dependent on (a) the amount of swimming activity or "load" imposed on the bath, (b) the amount of airborne organisms to which the bath is subjected and (c) pollution from water draining into the bath from the surrounds. It is very essential to take frequent chlorine residual tests at such baths, and all Superintendents of school swimming pools are equipped with comparator instruments for determining the amount of residual chlorine in the water which should be kept at about 0·5 parts per million. It is preferable to take readings at least two or three times a day and where residual chlorine has been lost owing to absorbtion by organic matter, more hypochlorite should be added to again step up the residual. If chlorination is carried out conscientiously and the residual regu'arly maintained, there should be no algoid growths on the sides of the bath. Bathers are naturally reluctant to swim in heavily chlorinated water both from the point of view of taste and from irritation to the eyes but this difficulty has been gradually overcome by modern developments in treating bath water with chlorine and at the same time maintaining the pH value of the water to give a slightly alkaline reaction. Where this is done, taste and irritation problems are greatly diminished.

Two baths used by Hertfordshire County Council school children were modified during 1950 to enable " break-point " chlorination to be used. This is a very efficient method of sterilizing the water as sufficient chlorine is added to break-up the chloramine compounds formed by the combination of the chlorine with ammonia compounds which are always present in such water. This releases residual chlorine which is very active and available to act on any bacteria.

At another bath used by our school children, an interesting problem has arisen and is now fortunately well on the way to solution. This particular bath is operated on a modified " fill and empty " system. The water supply to the bath is obtained from natural springs which fill the bath with a good quality water. The natural level of this spring water only partially filled the bath, and " topping up " water was formerly obtained from a nearby stream by means of a simple channel which passed through a sand filter of doubtful efficiency. This stream became polluted at regular intervals, especially after heavy rain had fallen due to street washings being discharged into it. It has now been possible to sink a bored well in the vicinity of the bath and the " topping-up " water is pumped into the bath from this to enable the required level of water to be maintained. Routine chlorination is carried out as at all other baths used by school children in the County and the pool is periodically emptied and cleaned out. The sampling results have shown a great improvement in the bacteriological standard of the bath water.

Three baths used by Hertfordshire school children are situated outside the County and the sampling and control of these is covered by the Local Sanitary Authorities. While the staff of the County Health Department regularly sampled several of the school swimming baths, the majority were

visited and sampled by the Sanitary Inspectors of the District Councils and sincere thanks are due to these Officers for their willing co-operation in forwarding data and sampling results to us.

3. Day Nurseries—Water Play.

Our work in connection with the supervision of school swimming baths has led me to inquire into the bacteriological standards of water in water play troughs and other appliances used in Day Nurseries. Great value is placed on this form of " play " which consists of three forms, (a) shallow water baths which are raised above the ground and in which children can play with various tins and other receptacles, (b) bowls in which the children learn to wash dolls and dolls clothing, and (c) Paddling Pools. In the first type, the children are liable to swallow some water.

On the face of it there was good reason for suggesting that it would be wise to introduce chlorine in the form of a hypochlorite into the water and this was done. Some months later arrangements were made for samples to be taken from the troughs. The first series showed fairly heavy contamination with coliform bacilli. More precise instructions in the use of chlorine were therefore issued to the Day Nurseries and a second series of samples were satisfactory. As far as I am aware water play has never been shown to be a cause of spreading infection in nurseries, but at the same time it is a potential cause of trouble which should and can easily be eliminated. A Health Authority would be open to serious criticism if it neglected to observe on its own premises the precautions which it insists on being taken by public water undertakers and other bodies.

Attention has also been paid to the bacterial content of the sand in childrens' play pits. Surprisingly enough this appears to be reasonably free from any significant infecting organisms. One had in mind suggesting that the sand should be treated with some disinfectant but apparently frequent raking and exposure to atmosphere and sunlight are sufficient safeguards.

4. Poliomyelitis—Virological Investigation.

Early in 1951 the County Health Department was notified by the Central Public Health Laboratory at Colindale that it was proposed to carry out a special investigation on a wide scale in an effort to detect the poliomyelitis virus in crude sewage. Several Counties were involved in the investigations and Hertfordshire was chosen as being one of those suitable for such an inquiry.

The work entailed the placing of gauze swabs in the manholes of sewerage systems draining limited areas of residential development, the swabs afterwards being examined biologically for the presence of the virus. Swabs were submitted from two Urban areas each with a population slightly greater than 10,000, one of which had a negative poliomyelitis history and the other with cases which had been notified during the last two years. A similar experiment was also undertaken in two village communities of comparable size each of which had a sewered population around 1,500. As in the case of the larger Urban areas, one of the villages had no recent poliomyelitis history, while the other had had several confirmed cases.

After the swabs had been left in the manholes for three days they were gathered and placed in sterile jars for dispatch to the Central Laboratory. Preparation of the specimens and the subsequent effort to detect the virus was a long and protracted affair but positive results were obtained in the case of one village and further investigations are still proceeding.

It is hoped that by comparing the results of this widespread experiment, some light can be thrown on the excretion and spread of the poliomyelitis virus. One of the mysteries in connection with the disease is why some neighbouring communities which are comparable in size, industry, and topography have widely differing poliomyelitis histories.

The virological investigation would not have been possible without the valuable aid of Medical Officers of Health, Sanitary Inspectors, and Surveyors who worked in close conjunction with the County Staff.

5. Housing.

Now that the Housing Act, 1949, has been in force for two years it is possible to give a brief summary of the operation of this Act and future developments. The Act is important in that it enables owners of houses to obtain improvement grants in respect of their property. These grants are made through Local Authorities and are limited to between £100 and £600. Certain restrictions are imposed on the letting of a house which has been subject to an improvement grant and among other things it must be occupied by the applicant for the grant or a member of his family, or made available for letting at a controlled rental. As these conditions are imposed for a period of twenty years from the date of the grant and the house must be kept habitable for not less than thirty years, owners have not been enthusiastic in applying for aid.

The very urgent demand at the present time is for basic repairs and improvements. The financial help given under this Act is for improvements only. The owners of the type of property dealt with under this Act are probably reluctant to carry out improvements as opposed to essential repairs in return for a grant of money which may prejudice the disposal of the cottage or property should this ever become necessary. At present we are in a most unfortunate impasse. It is true that organized house building labour is preoccupied with building new houses, it is equally true that existing houses are deteriorating rapidly while new houses are being erected. If the present state of affairs continues it will take very many years indeed to catch up with the housing problem. It is quite unrealistic to insist that the owners of low rental property should maintain it in a fit condition. The owners who can afford to do so are doing it at a very great loss, since the rents received bear no relation to the annual outlay on the maintenance and repairs. Many owners, however, are quite unable to deplete further an inadequate investment income in order to spend money on property which was intended to provide them with a supplementary income in their retirement. Something must be done to revise the present system of rent control or some alternative system must be found to give help to house owners who genuinely cannot afford to maintain properties in good order. I am sure such a policy would be found to be an economy in the long run.

New Housing.

The following Table shows the position regarding new housing provided by local authorities in the County from the 1st April, 1945, to the end of 1950 and 1951. The figures were obtained from the Ministry of Housing and Local Government returns.

Table 32.

	Year 1950.			Year 1951.		
	Permanent Housing		Temporary Housing Completed	Permanent Housing		Temporary Housing Completed
	No. under Construction	Completed		No. under Construction	Completed	
Boroughs.						
Hemel Hempstead	98	312	50	88	391	50
Hertford	81	185	50	46	276	50
St. Albans	247	1,001	109	242	1,283	109
Watford	402	1,063	100	493	1,484	100
Urban Districts.						
Baldock	36	205	—	10	231	—
Barnet	36	235	100	52	271	100
Berkhamsted	34	138	30	75	157	30
Bishop's Stortford	—	445	85	32	445	85
Bushey	38	265	50	17	306	50
Cheshunt	30	460	135	30	490	135
Chorleywood	10	68	—	2	78	—
East Barnet	48	486	50	35	574	50
Harpenden	74	300	25	79	369	25
Hitchin	74	269	50	76	325	50
Hoddesdon	56	240	38	46	316	38
Letchworth	119	536	50	172	627	50
Rickmansworth	16	570	100	16	586	100
Royston	26	109	—	44	139	—
Sawbridgeworth	14	65	10	12	79	10
Stevenage	20	188	20	33	216	20
Tring	6	94	—	8	100	—
Ware	30	152	13	58	186	13
Welwyn Garden City	26	380	150	68	408	150
Rural Districts.						
Berkhamsted	22	62	—	16	84	—
Braughing	52	283	—	35	325	—
Elstree	74	689	100	115	753	100
Hatfield	64	421	66	111	469	66
Hemel Hempstead	61	157	35	78	233	35
Hertford	40	194	—	25	237	—
Hitchin	77	266	38	111	313	38
St. Albans	89	462	6	120	591	6
Ware	24	268	—	26	306	—
Watford	66	240	50	6	310	50
Welwyn	39	67	46	44	92	46
Totals	2,129	10,875	1,556	2,421	13,050	1,556

These figures do not include London County Council housing estates now in the process of development at Oxhey and Boreham Wood or the New Town development at Hatfield, Welwyn Garden City, Stevenage, and Hemel Hempstead.

6. Refuse Disposal.

Provisions exist under the Hertfordshire County Council Act, 1935, which enable the County Council and the District Council concerned to control the tipping of refuse collected within the boundary of one county district and disposed of in another county district. This ability to control "imported refuse" is of great value when taking into consideration the proximity of the County to the heavily built-up areas of Greater London. In London itself there is a considerable refuse disposal problem in that there is no land available to enable internal tipping or disposal arrangements to be considered on a large scale. Much of London's refuse has to be barged down the river to large disposal areas in the Essex Marshes, or else it has to be exported by road or rail to tipping sites outside the Greater London area.

As Hertfordshire has many mineral workings there are numerous excavated sites in the County which are suitable for the disposal of household refuse, and therefore it is not unexpected that a considerable quantity of London's refuse

finds its way here. Without the control on tipping which can be exercised under the Hertfordshire County Council Act it is fairly obvious that complications would arise. The conditions imposed enable refuse to be dealt with in a manner designed to cause the minimum nuisance and at the same time to ensure that land sterilized by mineral workings is brought back into cultivation. It is here that liaison between the Health Department and the County Planning Department is so essential and, I am happy to say, successful.

During 1950 and 1951 621 visits were made by the County Health Inspector to County Council controlled refuse tips. At the time of writing this report there are four controlled tips licensed under the Hertfordshire County Council Act for the reception of domestic refuse, while two receive destructor clinker and screenings. In fifteen cases only inorganic and non-putrescible materials are allowed to be deposited.

In addition to the more normal type of tipping activity, in 1951 a licence was issued under the Hertfordshire County Council Act, 1935, to permit the disposal of acetylene waste from a factory in the London area in a small gravel pit in the County. Special saline tests were carried out at the site in order to determine whether there was any chance of the subsoil waters being affected by this material, although analysis showed it to be composed of substances unlikely to cause pollution. After the results of the saline tests had become known, and after consultation with a Technical Committee of the interested Water Undertakers, tipping was allowed subject to special precautions in the consent which the contractors agreed to observe. Further tests on wells in the area failed to show any deterioration in the quality of drinking water which could be ascribed to this tipping activity.

Where a tipping site is partially filled with water, only non-putrescible material is allowed. This is satisfactory provided that the water is not allowed to become de-oxygenated. If this happens, then there is a likelihood of anærobic organisms multiplying and causing nuisances by acting on sulphates which are contained in the water and liberating obnoxious hydrogen sulphide gas. It is generally found that the water in which inorganic refuse is being tipped begins to deteriorate when the water area has been reduced to a critical size towards the end of the filling process. This critical size will depend to a large extent on the rate at which tipping is being carried out—in other words the time allowed for the water to "recuperate" by absorbing oxygen from the atmosphere is important. Another factor which determines the degree of deterioration is whether the site is exposed, allowing the water to be aerated by the wind.

In my 1949 Report, I discussed at considerable length the many problems associated with the disposal of household refuse, and expressed the view that the time had come when we could no longer act on the assumption that domestic refuse was necessarily a dangerous commodity. Reference was made to our attempts to prove or disprove this assumption, and at the conclusion of the Report I suggested that this problem should be studied nationally. The County Council accepted this view, and the question was referred to the Ministry of Health with the suggestion that some central body such as the Department for Scientific and Industrial Research might be prepared to undertake a study of this kind.

One hopes that the Council's action may have been in part responsible for the fact that, in the Spring of 1952, a Working Party was set up by the Ministry of Housing and Local Government to report on the need for research into this aspect of the problem of the disposal of domestic refuse, and to suggest the lines and probable cost of a suitable research project. I was honoured by an invitation to serve on this Working Party.

In my 1949 Report, I suggested that our problem in Hertfordshire must be of importance to many other Local Health Authorities. When I expressed that opinion, I did not realize how justified it was. As a result of that Report and of my nomination to the Working Party, I find that Hertfordshire's

problem is but a small element in a vast national problem, and that our worries are trifling and easily solved in comparison with those of many of our neighbours.

In this County, there has been no need so far to suggest the tipping of domestic refuse into wet pits. We were concerned about the justification for compelling refuse-collecting vehicles to make long trips because they were banned from using convenient local pits which were in proximity to public water supplies.

Some of our neighbours have had to face a choice between :—

(a) Using a long chain of wet pits in the Thames Valley ;

(b) Providing an expensive destructor, in which case they still had a residual problem ;

(c) Further defacing the countryside by tipping on useful land ; or

(d) Meeting the cost of having the refuse transported to a district where there were suitable dry tipping sites.

It is not surprising that experiments in wet tipping have been going on for many years in the Thames Valley, and that research on this subject is regarded as more important—though admittedly more difficult—than the relatively simple problem which I propounded.

In the two years that have elapsed since I did so, the economic side of the problem has assumed an even greater urgency. The increasing costs of transport and labour have made sand and gravel contractors look to the most convenient sources for their supplies. With the great demand for sand and gravel a planning decision to deny an owner the right to work the minerals on conveniently situated land which he has acquired for this purpose because ultimate reclamation by tipping might be opposed cannot be lightly taken and may have serious financial consequences for the Planning Body.

A revolution in the technique of big-scale tipping has also played its part. This change is due to three main factors :—

(1) The fact that road transport now seriously competes with railways ;
(2) The high cost of even the least-skilled forms of human labour ;
(3) The war-time development of earth-moving machinery.

A town with a refuse disposal problem usually has good railway services. In the past, mineral workings which ultimately led to large tipping sites were dependent on the railway system for carrying away the excavated materials. A town therefore collected its domestic refuse near a railway siding. Trucks loaded with refuse were marshalled to trains, which proceeded to the tipping site. Here the trucks were unloaded by grabs to hoppers running on a narrow-gauge railway to the working face, where they were man-handled into position and tipped.

This was at one time the only obvious way to handle a large bulk of material. Rail freights were relatively low. Wheeled vehicles could not run on the tips because the surface was too loose, so that the refuse had in any case to be transferred to hoppers. Very little high grade labour had to be employed apart from the supervisors and the mechanics handling the machinery.

There were two main objections to this system. In the towns, it meant that the refuse had to be concentrated at one point which, even with the utmost care, inevitably became rather unsavoury and unacceptable to the neighbourhood. Similarly, at the tips, the off-loading process was concentrated at the rail-head and, even in the best-run tips, it was impossible to keep the site clean and free from vermin.

It is now possible, by using road haulage, for a Town Authority to have its refuse removed immediately it is collected. For a time this was not encouraged, because it was difficult to fit the refuse arriving in lorries into the tipping scheme employed on a site catering for refuse arriving by rail. Increased labour costs, however, led in time to the use of bulldozers and other tracked vehicles on the refuse dumps, and it was soon found that where these

vehicles had been working regularly, the tip surface quickly consolidated and could be used by ordinary wheeled lorries.

When it became practical to direct the lorries to any particular point desired, a new tipping technique developed. Hitherto, a lorry-driver bringing refuse to a dump was encouraged to back dangerously near to the tip-face so that his load could be run down below the surface level. Where a bulldozer is used, there is no need to run this risk.

It was found, too, that loads arriving at the tips could usefully be differentiated. Objectionable materials are deposited near the tipping face. The bulldozer gets to work pushing the materials over the edge and, at the same time, consolidating the advancing margin of the tip. Useful covering material is tipped where it is required, either to improve the covering of the tip or to seal the face.

The whole process of tipping has now been speeded up. The lorries drive over a wide area to the spot where the load is wanted. The tipping device on the lorry empties the load, and the lorry is quickly in commission again. There need no longer be a procession of vehicles ploughing along a specially-made roadway to the same part of the tip, reversing laboriously and dangerously to the edge and—not infrequently—becoming bogged until the lorry is eventually towed out by another driver.

The new method means a saving of time, wages, and wear and tear on vehicles, and these are the items which account for the cost of the disposal of refuse by tipping. It is now an attractive proposition to tip by lorry at distances which were previously unthinkable.

At the same time, the development of road transport has now made it possible to open up vast mineral workings wherever there is reasonable road access. It is no longer necessary first to consider whether there is a railway handy to take away the products of the workings.

Thus, tipping space has become available in worked-out pits which previously had to be disregarded because they were not accessible by rail, or in new workings which could not hitherto be developed on a large scale for the same reason. In both cases, the pit may offer to a neighbouring town a convenient solution to the refuse disposal problem, but by the same token a pit near a town may well be associated with a poorly protected underground supply of drinking water.

Thus, responsible Authorities in an increasing number of instances are faced with the choice of tipping locally and taking a risk in the light of our present knowledge on the subject of possible water pollution, or of incurring heavy expenditure in order to convey refuse to a site which is accepted by all as being beyond suspicion.

It is, of course, in the vicinity of the towns too that Authorities are urged to fill up worked-out pits in order to remove local eyesores and create valuable additional land for agriculture, building, or recreation, and domestic refuse is usually the only filling material which one can be sure of getting in increasing quantities for an indefinite time.

Apart from this question of improving local amenities, the need to know beyond doubt whether tipping is safe or whether it is not safe is urgent on financial grounds alone.

There is no reliable way of calculating precisely or expressing accurately the cost of an unnecessary mile of road haulage but refuse disposal is universal and the cost to the nation in terms of motor fuel, wear and tear, and unprofitable use of working time by expensive vehicles and crews is already prodigious. Every unnecessary mile on an individual scheme could, in total, make formidable additions to the cost. There should surely be no need to spend much time considering at length whether, during these times of financial stress, there is justification for spending money on a research project which might cut considerably the cost of refuse disposal. In fact our present financial difficulties add greatly to the priority which this research demands.